Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62785 Date: 8-14-2002
Art Unit: 1653 Phone Number 308-3975 Serial Number: 09/805,016
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL
CM1-9801 | CM1-9807

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

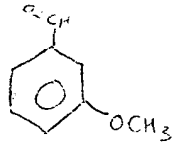
Title of Invention: Use of o-vanillin and o-vanillin/trolox combinations

Inventors (please provide full names): E. Shalaev, R. Reddy, R. Kimball

Earliest Priority Filing Date: 3-12-2001

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the following partial structure:



Please use the following keywords to narrow down any hits:

1) radiolabeled?, radiation

2) protein, insulin, interferon, collagen, keratin, immunoglobulin, somatotrophin

3) isopropanol, Trolox, ~~tetramethyl~~ tetramethylchroman?

Thank you.
JER

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STAFF USE ONLY	Type of Search		Vendors and cost where applicable
Searcher: SH	NA Sequence (#)		STN
Searcher Phone #: 308-4479	AA Sequence (#)		Dialog
Searcher Location:	Structure (#)		Questel/Orbit
Date Searcher Picked Up:	Bibliographic		Dr.Link
Date Completed: 8/14/02	Litigation		Lexis/Nexis
Searcher Prep & Review Time:	Fulltext		Sequence Systems
Clerical Prep Time:	Patent Family		WWW/Internet
Online Time:	Other		Other (specify)

PTO-1590 (8-01)

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 21:31:48 ON 16 AUG 2002
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FILE COVERS 1907 - 16 Aug 2002  VOL 137 ISS 8
FILE LAST UPDATED: 15 Aug 2002  (20020815/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

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=>

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L1                STR
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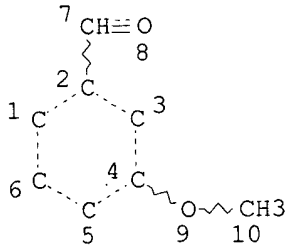


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L2          4322 SEA FILE=REGISTRY SSS FUL L1
L3          9157 SEA FILE=REGISTRY ABB=ON  PLU=ON  INSULIN OR INTERFERON
L4         38890 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLAGEN OR KERATIN OR
                 IMMUNOGLOBULIN OR SOMATOTROP?
L5           600 SEA FILE=REGISTRY ABB=ON  PLU=ON  ISOPROPANOL OR TROLOX OR
                 TETRAMETHYLCHROMA?
L6         17384 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2
L8            22 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6(L)(RADIOPROTEC? OR
                 RADIATION)
L9        510833 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR L4 OR INSULIN OR
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                INTERFERON OR COLLAGEN OR KERATIN OR IMMUNOGLOBULIN OR
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                OR TETRAMETHYLCHROMA?
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L12             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10(L)L6
L13            44 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 OR L11 OR L12


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L13  ANSWER 1 OF 44  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:11108  HCAPLUS
DOCUMENT NUMBER:          136:69654
TITLE:                    Preparation of diphenylethylene compounds as
                          antidiabetic agents
INVENTOR(S):              Nag, Bishwagit; Dey, Debendranath; Medicherla,
                          Satyanarayana; Neogi, Partha
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 38 pp., Cont.-in-part of U.S.
                          Ser. No. 642,618.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     US 2002002200      A1   20020103       US 2001-777551    20010205
PRIORITY APPLN. INFO.:                   US 2000-180340P  P  20000204
                                         US 2000-642618   A2 20000817
OTHER SOURCE(S):          MARPAT 136:69654
GI
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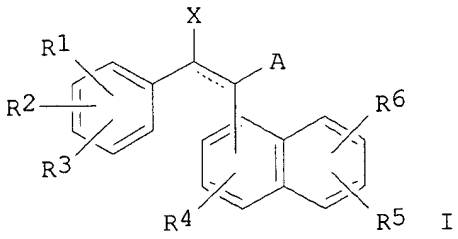

I

AB Title compds. I [wherein A = CO2R, CONR'R", CN, or COR7; X = H, OH, or (un)substituted alkyl or alkenyl; R = H, (ar)alkyl, or aryl; R1, R2, R3, R4, R5, R6, and R7 = independently H, (un)substituted alkyl or alkenyl; CO2R, NR'R", or CONCR'R"; R' and R" = independently H, alkyl, aryl, OH, alkoxy, acylamino, acyloxy, alkanoyl, alkoxylcarbonyl, halo, NO2, SO2R'''; CZ3; Z = independently H, halo, (halo)alkyl, or SR'''; R''' = H or alkyl; or R2 and R3 together or R5 and R6 together may be joined to form (m)ethylenedioxy; with provisos; and E and Z isomers thereof] were prepd. and shown to decrease circulating concns. of glucose when administered orally. For instance, 3,5-dimethoxybenzaldehyde was coupled with p-hydroxyphenyl acetic acid using TEA in acetic anhydride to give (E)-3-(3,5-dimethoxyphenyl)-2-(4-hydroxyphenyl)acrylic acid (II), which

exhibited glucose-lowering effects for more than 15 days at a dose of 20 mg/kg p.o. Examples also include twenty-six bioassays, such as studies on the effects of II on insulin resistant rats, lipid and leptin concns., PPAR binding, overexpression of the human insulin-like growth factor 1 receptor and human insulin receptor, toxicity, and kinectics of drug absorption. I are orally effective antidiabetic agents that normalize glucose and lipid metab.

IT **120-14-9**, 3,4-Dimethoxybenzaldehyde **7311-34-4**, 3,5-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and testing of diphenylethylene antidiabetic agents that normalize glucose and lipid metab. in relation to **insulin** resistance)

L13 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:853573 HCAPLUS
DOCUMENT NUMBER: 136:251727
TITLE: Abatement of the major contaminants present in olive oil industry wastewaters by different oxidation methods: Ozone and/or UV radiation versus solar light
AUTHOR(S): Miranda, M. A.; Amat, A. M.; Arques, A.
CORPORATE SOURCE: Dipartimento de Quimica e Instituto de Tecnologia Quimica UPV-CSIC, Universidad Politecnica de 22012, Valencia, E-46071, Spain
SOURCE: Water Science and Technology (2001), 44(5, Oxidation Technologies for Water and Wastewater Treatment II), 325-330
CODEN: WSTED4; ISSN: 0273-1223
PUBLISHER: IWA Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Cinnamic acids (caffeic acid, ferulic acid, p-coumaric acid and cinnamic acid) in olive oil wastewaters were treated with advanced oxidn. methods: ozone and/or UV radiation. Basic and acid media were tested. Differences between all 4 acids were found, both in the reaction times and the intermediates formed. Based on a careful study of these intermediates and the variation of their concns. all along the reaction time, a formation mechanism for the degradative oxidn. of cinnamic acids is proposed. These results are compared with those obtained with solar light, using a pyrylium salt as a catalyst.

IT **121-33-5**, Vanillin
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(abatement of major contaminants present in olive oil industry wastewaters by ozone and UV **radiation** vs. solar light)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:709690 HCAPLUS
DOCUMENT NUMBER: 135:236395
TITLE: Use of o-vanillin and o-vanillin/Trolox combinations for radioprotection of solid-state proteins, preferably protein drugs, and pharmaceutical formulations
INVENTOR(S): Shalaev, Evgenyi Yur'evich; Reddy, Renuka Devi; Kimball, Roger Nelson
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1136080	A2	20010926	EP 2001-302066	20010307
EP 1136080	A3	20020605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001316294	A2	20011113	JP 2001-62892	20010307
US 2001049354	A1	20011206	US 2001-805016	20010312
BR 2001000954	A	20011218	BR 2001-954	20010313

PRIORITY APPLN. INFO.: US 2000-189101P P 20000314

AB The invention provides methods of protecting solid-state proteins, e.g. drugs, from the effects of ionizing radiation which comprise combining the protein with a radiation-protecting amt. of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde; radiation-protecting amts. of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde, and 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid; or radiation-protecting amts. of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde, and isopropanol, prior to exposing the protein to ionizing radiation. The invention further provides radiation-resistant pharmaceutical formulations comprising a protein and a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde; a protein and a combination of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde, and 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid; or a protein and a combination of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde, and isopropanol. The invention still further provides a compn. comprising a combination of a methoxysalicylaldehyde deriv., preferably 3-methoxysalicylaldehyde, and 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid, and for the use of such compn. in pharmaceutical formulations as a radioprotectant.

IT **148-53-8**, o-Vanillin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(o-vanillin and o-vanillin/**Trolox** combinations for **radioprotection** of solid-state proteins, preferably protein drugs, and pharmaceutical formulations)

L13 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	2001:651941 HCAPLUS
DOCUMENT NUMBER:	136:12688
TITLE:	EPR study on .gamma.-irradiated single crystals of a nonlinear optical material: 3-methoxy-4-hydroxy benzaldehyde
AUTHOR(S):	Manikandan, S.; Jayavel, R.; Dhanuskodi, S.
CORPORATE SOURCE:	V.D. Polytechnic, Nagapattinam, 611001, India
SOURCE:	Materials Chemistry and Physics (2001), 72(1), 1-4 CODEN: MCHPDR; ISSN: 0254-0584
PUBLISHER:	Elsevier Science S.A.
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Single crystals of nonlinear optical (NLO) material 3-methoxy-4-hydroxy benzaldehyde (MHBA) were grown following slow evapn. method. The grown crystals were characterized by the measurement of unit cell dimensions single crystal x-ray diffraction, d., m.p. and x-ray powder diffraction pattern. Hardness study for the grown crystals was carried out. The grown crystals were .gamma.-irradiated to produce free radicals and were analyzed by ESR (EPR) technique.

IT **121-33-5**, 3-Methoxy-4-hydroxy benzaldehyde
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
(growth and characterization and **radiation** damage of methoxyhydroxybenzaldehyde nonlinear optical materials)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:581654 HCAPLUS
DOCUMENT NUMBER: 135:147444
TITLE: Novel diphenylethylene compounds
INVENTOR(S): Nag, Bishwajit; Dey, Debendranath; Medicherla, Satyanarayana
PATENT ASSIGNEE(S): Calyx Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056382	A1	20010809	WO 2001-US3797	20010205

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-180340P P 20000204
US 2000-642618 A 20000817

OTHER SOURCE(S): MARPAT 135:147444
AB Novel diphenylethylene compds. that are administered orally to decrease circulating concns. of glucose are provided. The effect on insulin resistant rats is also shown. The effects on lipid and leptin concns. are also shown. The compds. are orally effective anti-diabetic agents that may normalize glucose and lipid metab. in subjects with diabetes.
IT **120-14-9**, 3,4-Dimethoxybenzaldehyde **7311-34-4**, 3,5-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(novel diphenylethylene compds. that are anti-diabetic agents that normalize glucose and lipid metab. in relation to **insulin** resistance)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:380556 HCAPLUS
DOCUMENT NUMBER: 135:5625
TITLE: Diabetic remedy containing dipiperazine derivative
INVENTOR(S): Yamaguchi, Hiroshi; Maruta, Katsunori; Nagata, Ryu; Ushiroda, Kantaro; Iwai, Kiyotaka
PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan
SOURCE: PCT Int. Appl., 176 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036386	A1	20010525	WO 2000-JP8065	20001115

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 1999-326751 A 19991117
OTHER SOURCE(S): MARPAT 135:5625
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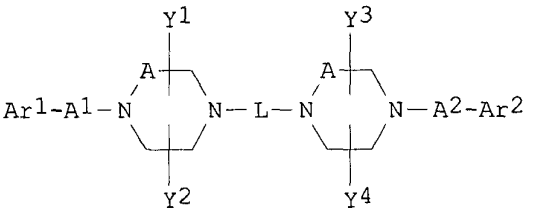

I

AB A remedy for diabetes contains a dipiperazine deriv. represented by formula (I) or a pharmacol. acceptable salt thereof. [wherein Ar1 and Ar2 each represents optionally substituted Ph, naphthyl, or heterocyclyl; A1 and A2 each represents optionally substituted alkylene or carbonyl (provided that not both of A1 and A2 are carbonyl); A represents methylene or ethylene; Y1, Y2, Y3, and Y4 each represents hydrogen or alkyl; L represents -L3-X1-L1-X2-L2-X3-L4-; L3 and L4 each represents carbonyl or sulfonyl; X1 and X3 each represents a single bond, NR1, or O; R1 represents hydrogen or alkyl; X2 represents a single bond, optionally substituted alkylene, heteroarylene, phenylene, or cycloalkylidene, cycloalkylene, divalent aliph. heterocyclic group, vinylene, ethynylene, S, O, NR2CO, NR3CONR4, NR2CO2, OCO2, O2C, CO, or N(COR5); etc.; R2, R3, R4, and R5 each represents hydrogen or alkyl; and L1 and L2 each represents a single bond, optionally substituted alkylene, vinylene, or phenylene; provided that when X2 is single bond, vinylene, ethynylene, S, O, NR2CO, NR3CONR4, NR2CO2, OCO2, O2C, CO, or N(COR5), L1 or L2 is not a single bond; or when L1 or L2 is vinylene, X1 and X3 are a single bond]. These compds. lower blood sugar level and improve insulin resistance. Thus, 110 mg N-[4-(1-piperazinylcarbonyl)phenyl]-1-piperazinecarboxamide (prepn. given) was dissolved in 6 mL DMF, treated with 195 mg K2CO3 and 270 mg 4-(trifluoromethyl)benzyl bromide, and stirred at 50.degree. for 5 h to give 4-[4-(trifluoromethyl)benzyl]-N-[4-[[4-[4-(trifluoromethyl)benzyl]-1-piperazinyl]carbonyl]phenyl]-1-piperazinecarboxamide (II). II was administered to mice at 3 mg/kg p.o., immediately followed by insulin 3 U/kg s.c. After 4 h, the blood sugar level lowered from 261.+-.92 (control) to 129.+-.43 mg/dL.

IT **120-14-9**, 3,4-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of dipiperazine derivs. as hypoglycemics and antidiabetics for improving **insulin** resistance)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:355085 HCAPLUS
DOCUMENT NUMBER: 134:353250
TITLE: Preparation of .alpha.-(biphenylyloxo)alkanoic acids

for treatment of insulin resistance and hyperglycemia

INVENTOR(S): Malamas, Michael S.; Mcdevitt, Robert E.; Adebayo, Folake O.
PATENT ASSIGNEE(S): American Home Products Corporation, USA
SOURCE: U.S., 30 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6232322	B1	20010515	US 1999-307972	19990510
US 2001041715	A1	20011115	US 2001-798109	20010302
US 6391897	B2	20020521		
US 2001053785	A1	20011220	US 2001-798088	20010302
US 6369072	B2	20020409		

PRIORITY APPLN. INFO.: US 1998-113654P P 19980512
US 1998-76205 A 19980512
US 1999-307972 A3 19990510
OTHER SOURCE(S): MARPAT 134:353250
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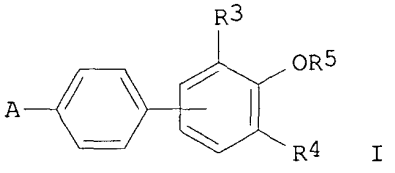

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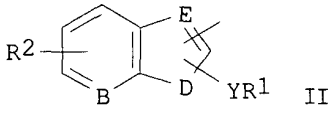
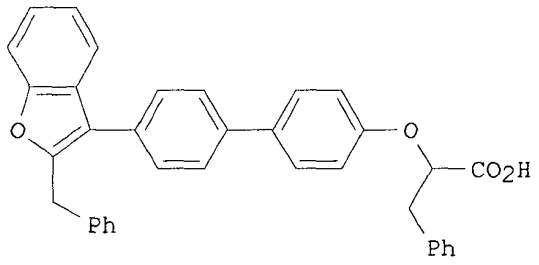


II



III

AB The title compds. [I; A = II (wherein B = C; D = O, S, N; E = C; Y = a bond, CH2; CO, CHOH; R1 = alkyl, aryl, arylakyl, etc.; R2 = H, alkyl, alkoxy, etc.); R3, R4 = H, halo, alkyl, etc.; R5 = H, alkyl, etc.] were prepd. as protein-tyrosine phosphatase inhibitors. Thus, 4-BrC6H4COCH2Br was etherified by PhOH and the cyclized product condensed with 4-(MeO)C6H4B(OH)2 to give, after O-demethylation, 3-(4'-hydroxybiphenylyl)benzofuran which was acylated by BzNMeOMe and the reduced product etherified by (R)-PhCH2CH(OH)CO2Me to give, after sapon., title compd (S)-III. Data for biol. activity of I were given.
IT **120-14-9**, 3,4-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of .alpha.-(biphenylyloxo)alkanoic acids for treatment of **insulin** resistance and hyperglycemia)
REFERENCE COUNT: 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:298858 HCAPLUS
DOCUMENT NUMBER: 134:315873
TITLE: Aromatic aldehydes and ketones with imidazoles as coloring agents for keratin fibers
INVENTOR(S): Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 14 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19951134	A1	20010426	DE 1999-19951134	19991023
WO 2001034106	A1	20010517	WO 2000-EP10125	20001014

W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: DE 1999-19951134 A 19991023
OTHER SOURCE(S): MARPAT 134:315873

AB Oxidative hair dyes contg. arom. aldehydes and ketones combined with imidazoles and other heterocyclic compds. are disclosed. Arom. components may include salicylaldehyde, 3-hydroxybenzaldehyde, 4-hydroxybenzaldehyde, o-anisaldehyde, etc. Heterocyclic components may include 1,4-dimethylquinolinium salts, 1,2-dimethylquinolinium salts, 1,4-dimethylpyridinium salts, 3-ethyl-2-methylbenzothiazolium salts, etc. These may be combined with rhodanine, barbituric acid, thiobarbituric acid, oxindole, etc.

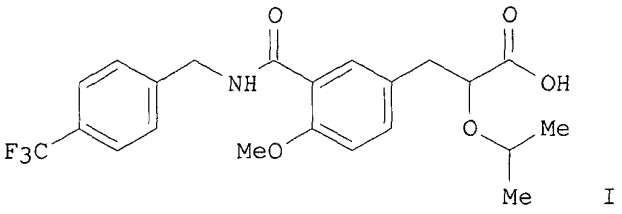
IT **93-02-7**, 2,5-Dimethoxybenzaldehyde **120-14-9**, 3,4-Dimethoxybenzaldehyde **121-33-5**, Vanillin **3934-87-0**, 3,4-Dihydroxy-5-methoxybenzaldehyde
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(arom. aldehydes and ketones with imidazoles as coloring agents for **keratin** fibers)

L13 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:265369 HCAPLUS
DOCUMENT NUMBER: 134:295620
TITLE: Preparation and effect of 4-methoxyphenylpropionic acid derivatives useful in insulin resistance improvement
INVENTOR(S): Shinoda, Masanobu; Emori, Eita; Matsuura, Fumiyoshi; Kaneko, Toshihiko; Ohi, Norihito; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Miyashita, Sadakazu; Hibara, Taro; Seiki, Hisashi; Clark, Richard; Harada, Hitoshi
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 350 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001025181	A1	20010412	WO 2000-JP6788	20000929

W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE
AU 2000074499 A5 20010510 AU 2000-74499 20000929
EP 1216980 A1 20020626 EP 2000-962993 20000929
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY
PRIORITY APPLN. INFO.: JP 1999-282079 A 19991001
JP 1999-369442 A 19991227
JP 2000-38795 A 20000216
JP 2000-104260 A 20000406
JP 2000-2000038795A 20000216
JP 2000-2000104260A 20000406
WO 2000-JP6788 W 20000929
OTHER SOURCE(S): MARPAT 134:295620
GI



I

AB Title compds. [Y:L:X:TZM:CWR1; R1 is hydrogen, hydroxyl, alkyl; L is single bond, double bond, alkylene; M is single bond, alkylene; T is single bond, alkylene; W is carboxyl, amide; X is oxygen, alkenylene; Y is arom. hydrocarbon; Z is arom. hydrocarbon; colon represents single, or double bond], salts, esters, and hydrates are prepd. and are useful in prevention or treatment of diabetes and X-syndrome. Thus, the title compd. I was prepd. and biol. tested.

IT **71295-21-1**, Benzaldehyde, 5-Bromo-2,3-dimethoxy-
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and effect of methoxyphenylpropionic acid derivs. useful in **insulin** resistance improvement as PPAR agonists)

IT **334016-42-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and effect of methoxyphenylpropionic acid derivs. useful in **insulin** resistance improvement as PPAR agonists)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:262725 HCAPLUS
DOCUMENT NUMBER: 135:2250
TITLE: Negligible influence of elevated UV-B radiation on leaf litter quality of Quercus robur
AUTHOR(S): Newsham, K. K.; Splatt, P.; Coward, P. A.; Greenslade, P. D.; McLeod, A. R.; Anderson, J. M.
CORPORATE SOURCE: Centre for Ecology and Hydrology, Huntingdon, PE14 2LS, UK
SOURCE: Soil Biology & Biochemistry (2001), 33(4-5), 659-665
CODEN: SBIOAH; ISSN: 0038-0717
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors tested whether elevated UV-B radiation applied to Quercus robur, a principal climax species of northern Europe, would influence concns. of polyphenolics (Folin-Denis tannins and lignin), phenylpropanoid

moieties of lignin, carbohydrates (monosaccharides and holocellulose), or nutrient elements (K, Ca, Mg, P and N) in recently-abscised leaf litter. Saplings of Q. robur were exposed for 2 yr at an outdoor facility in the UK to a 30% elevation above the ambient amt. of erythemally-weighted UV-B (280-315 nm) radiation under arrays of fluorescent lamps with cellulose diacetate filters, which transmitted both UV-B and UV-A (315-400 nm) radiation. Saplings were also exposed to elevated UV-A alone under arrays of lamps with polyester filters and to ambient radiation under nonenergized arrays of lamps. Little evidence was found that elevated UV-B radiation influenced leaf litter quality. Data pooled for both years indicated an 8% increase in vanillic acid concn. in litter from polyester-filtered lamp arrays, relative to nonenergized arrays, and 8% and 6% increases, resp., in concns. of acetovanillone in litter from polyester- and cellulose diacetate-filtered lamp arrays, relative to nonenergized lamp arrays. Arabinose concn. in litter from cellulose diacetate-filtered lamp arrays was 3% higher than in litter from polyester-filtered arrays, and glucose concn. in litter from cellulose-diacetate filtered lamp arrays was increased by 6%, relative to nonenergized arrays. There were no main effects of elevated UV on the concns. of holocellulose, polyphenolics or nutrient elements. Thus, exposure to elevated UV-B does not substantially influence the initial chem. compn. of Q. robur leaf litter, and any increases in UV-B radiation arising from ozone depletion over northern mid-latitudes will be unlikely to affect nutrient cycling and decompn. in Quercus woodlands through effects on litter quality alone.

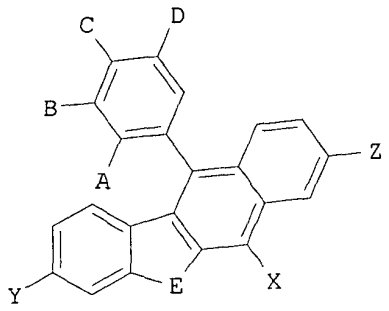
IT **121-33-5**, Vanillin **134-96-3**, Syringaldehyde
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(negligible influence of elevated UV-B **radiation** on leaf litter quality of Quercus robur)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:607330 HCAPLUS
DOCUMENT NUMBER: 133:193067
TITLE: Preparation of 11-aryl-benzo[b]naphtho[2,3-d]furans and 11-aryl-benzo[b]naphtho[2,3-d]thiophenes for treating insulin resistance and hyperglycemia
INVENTOR(S): Wrobel, Jay E.; Dietrich, Arlene J.; Li, Zenan
PATENT ASSIGNEE(S): American Home Products Corporation, USA
SOURCE: U.S., 67 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6110962	A	20000829	US 1999-307840	19990510

PRIORITY APPLN. INFO.: US 1998-98554P P 19980512
OTHER SOURCE(S): MARPAT 133:193067
GI



I

AB The title compds. [I; A = H, halo, OH; B, D = H, halo, CN, etc.; E = S, SO, SO2, O; X = H, halo, alkyl, etc.; Y, Z = H, OR2; R2 = H, alkyl, aralkyl, CH2CO2R3; R3 = H, alkyl; C = H, halo, OR4 ; R4 = H, alkyl, CH(R5)W, etc.; R5 = H, alkyl, aralkyl, etc.; W = CONH2, CONHOH, CN, etc.; with the proviso that at least one of A-D is not H atom] and their pharmaceutically acceptable salts, which are useful in treating insulin resistance and hyperglycemia, were prepd. E.g., a multi-step synthesis of I [A, B, D = H; C = OH; E = S; X, Y, Z = H] which showed -34.19% change from control in test for PTPase inhibition at 50 .mu.M, was given.

IT **591-31-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 11-aryl-benzo[b]naphtho[2,3-d]furans and 11-aryl-benzo[b]naphtho[2,3-d]thiophenes for treating **insulin** resistance and hyperglycemia)

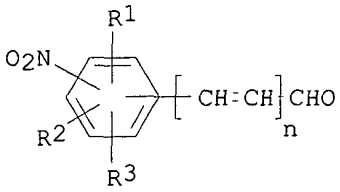
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:442128 HCAPLUS
DOCUMENT NUMBER: 133:79004
TITLE: Agents for coloring keratin fibers
INVENTOR(S): Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 17 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19859810	A1	20000629	DE 1998-19859810	19981223
WO 2000038634	A1	20000706	WO 1999-EP9910	19991214

W: AU, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: DE 1998-19859810 A 19981223
OTHER SOURCE(S): MARPAT 133:79004
GI



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AB Keratin fibers, esp. human hair, can be dyed with arom. nitro aldehydes [I; R1-R3 = H, halo, alkyl, hydroxyalkyl, aminoalkyl, alkoxy, acyl, OH, NO2, CO2H, acylamino, sulfo, (substituted) amino, or any 2 of R1-R3 may complete a condensed arom. ring; n = 0-2] in the presence of absence of oxidizing agents. These dyes provide outstanding brilliance and depth of color primarily in the yellow and orange range; the color range can be extended by addnl. use of primary or secondary aliph. or arom. amines or alcs., N-heterocycles, amino acids, oligopeptides, arom. OH compds., and/or active CH compds. Thus, a soln. contg. 4-nitrobenzaldehyde 5, 3-amino-2-methylamino-6-methoxypyridine-2HCl 5, NaOAc 5 mmol, and 1 drop 20% fatty alkyl ether sulfate in 50 mL H2O (pH 6) was applied to gray hair for 30 min at 30.degree. to produce an intense violet-brown color.

IT **6635-20-7**, 5-Nitrovanillin **17028-61-4**,
2-Hydroxy-3-methoxy-5-nitrobenzaldehyde **20357-25-9**,
4,5-Dimethoxy-2-nitrobenzaldehyde **53055-05-3**,
3-Methoxy-2-nitrobenzaldehyde
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(agents for coloring **keratin** fibers)

L13 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:364958 HCAPLUS
DOCUMENT NUMBER: 133:99524
TITLE: Vanillin (3-methoxy-4-hydroxybenzaldehyde) inhibits mutation induced by hydrogen peroxide, N-methyl-N-nitrosoguanidine and mitomycin C but not 137Cs .gamma.-radiation at the CD59 locus in human-hamster hybrid AL cells
AUTHOR(S): Gustafson, Daniel L.; Franz, Holly R.; Ueno, Akiko M.; Smith, Carr J.; Doolittle, David J.; Waldren, Charles A.
CORPORATE SOURCE: Department of Radiological Health Sciences, Colorado State University, Fort Collins, CO, 80523, USA
SOURCE: Mutagenesis (2000), 15(3), 207-213
CODEN: MUTAEX; ISSN: 0267-8357
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have investigated the ability of the naturally occurring plant essence vanillin (3-methoxy-4-hydroxybenzaldehyde) to inhibit mutation at the CD59 locus on human chromosome 11 by hydrogen peroxide, N-methyl-N-nitrosoguanidine, mitomycin C and 137Cs .gamma.-radiation in human-hamster hybrid AL cells. Previous studies using vanillin have suggested that it can inhibit chromosome aberrations induced by hydrogen peroxide and mitomycin C, as well as inhibiting x-ray- and UV-induced mutations at the hprt locus. Other studies with vanillin have shown that it can increase both the toxicity and mutagenicity of Et methane sulfonate and increase the induction of sister chromatid exchange by mitomycin C and a variety of other mutagens. The increased sensitivity of the AL assay, which is due in part to its ability to detect both small (single locus) and large (multilocus) genetic damage, allows the authors to measure the effect of vanillin at low doses of mutagen. Vanillin is shown, in these

studies, to inhibit mutation induced by hydrogen peroxide, N-methyl-N-nitrosoguanidine and mitomycin C, as well as to enhance the toxicity of these agents. Vanillin had no effect on either toxicity or mutation induced by 137Cs .gamma.-radiation. The vanillin-induced potentiation of H2O2 toxicity is shown not to involve inhibition of catalase or glutathione peroxidase. These results show that vanillin is able to inhibit mutation at the CD59 locus and modify toxicity in a mutagen-specific manner. Possible mechanisms to explain the action of vanillin include inhibition of a DNA repair process that leads to the death of potential mutants or enhancement of DNA repair pathways that protect from mutation but create lethal DNA lesions during the repair process.

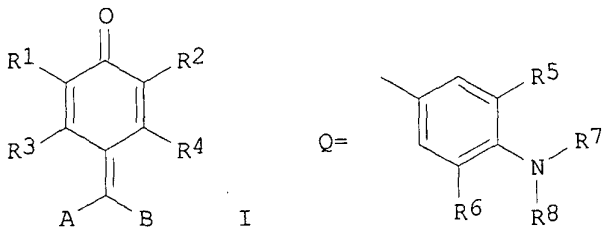
IT **121-33-5**, Vanillin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vanillin (3-methoxyhydroxybenzaldehyde) inhibits mutation induced by hydrogen peroxide and methylnitrosoguanidine and mitomycin C but not 137Cs .gamma.-**radiation** at CD59 locus in human-hamster hybrid AL cells)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:233974 HCAPLUS
DOCUMENT NUMBER: 132:260679
TITLE: Diarylquinonemethides, interferon .gamma. inhibitors, and pharmaceuticals
INVENTOR(S): Takahashi, Kazunobu; Kawakami, Masayuki; Kageyama, Shigeki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000103769	A2	20000411	JP 1998-273981	19980928

OTHER SOURCE(S): MARPAT 132:260679
GI



AB Pharmaceuticals for prevention and treatment of autoimmune diseases contain title compds. I [R1-R4 = H, halo, (substituted) C1-6 alkyl, (substituted) C1-6 alkoxy; A, B = Q; R5, R6 = H, halo, (substituted) C1-6 alkyl, alkoxy, alkylamino, alkylthio; R7, R8 = H, (substituted) C1-8 alkyl; R5R7, R6R8, R7R8 may form ring] or their salts. .alpha.-(4-Dimethylaminophenyl)-4-tert-butyldimethylsiloxy-3,5-

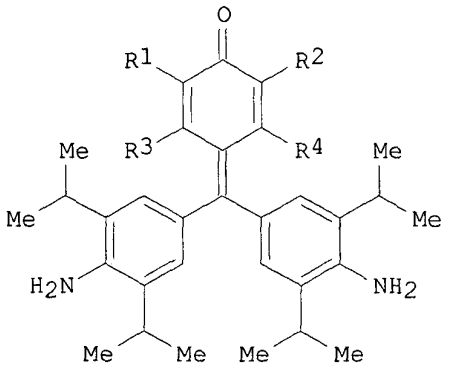
dimethoxybenzyl alc. (prepn. given) was treated with N-ethylbenzoxazine in the presence of Bu4N+ and H2SO4 in i-PrOH/THF under reflux for 5 h to give 67% condensate, which was oxidized by chloranil in AcOEt at room temp. for 5 h to give 46% I (R1 = R2 = OMe, R3 = R4 = H, A = C6H4NMe2-p, B = N-ethyl-1,4-benzoxazin-7-yl) (II). II in vitro inhibited interferon .gamma. formation with IC50 of 2.2 .mu.g/mL.

IT **106852-80-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of diarylquinonemethides as **interferon** .gamma. inhibitors)

L13 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:215987 HCAPLUS
DOCUMENT NUMBER: 132:246357
TITLE: Quinonemethides, interferon .gamma. inhibitors, and pharmaceuticals
INVENTOR(S): Sugai, Shoji; Nishikawa, Naoyuki; Aoki, Kozo; Kageyama, Shigeki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000095737	A2	20000404	JP 1998-271529	19980925

OTHER SOURCE(S): MARPAT 132:246357
GI



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AB Pharmaceuticals, useful for prevention and treatment of autoimmune diseases, contain quinonemethides I [R1-R4 = H, halo, NH2, acyl, acylamino, OH, (substituted) lower alkyl, (substituted) lower alkoxy] or their salts. 3,5-Dichloro-4-hydroxybenzaldehyde (95.5 g) was condensed with 177 g 2,6-diisopropylaniline in the presence of urea and H2SO4 in i-PrOH under reflux for 8 h, oxidized by chloranil in AcOEt under reflux for 2 h, and heated in MeOH to give 113 g I (R1 = R2 = Cl, R3 = R4 = H), which in vitro inhibited human interferon .gamma. formation with IC50 of 2.7 .mu.g/mL.

IT **121-33-5P**, 4-Hydroxy-3-methoxybenzaldehyde **134-96-3P**, 3,5-Dimethoxy-4-hydroxybenzaldehyde **2973-76-4P**, 5-Bromovanillin

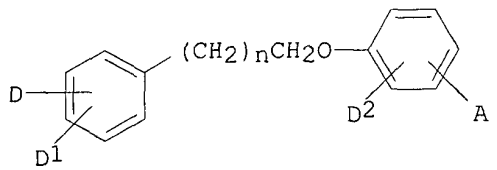
5438-36-8P, 5-Iodovanillin **19463-48-0P**, 5-Chlorovanillin
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of quinonemethides as **interferon** .gamma. inhibitors)

L13 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:784068 HCAPLUS
DOCUMENT NUMBER: 132:22756
TITLE: Preparation of new 3-arylpropionic acid derivatives and analogs and the use of the compounds in conditions associated with insulin resistance
INVENTOR(S): Andersson, Kjell; Boije, Maria; Gottfries, Johan; Inghardt, Tord; Li, Lanna; Lindstedt, Alstermark Eva-lotte
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.; Lindstedt Alstermark, Eva-Lotte
SOURCE: PCT Int. Appl., 177 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962871	A1	19991209	WO 1999-SE942	19990531
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9946672	A1	19991220	AU 1999-46672	19990531
BR 9910921	A	20010306	BR 1999-10921	19990531
EP 1084102	A1	20010321	EP 1999-930060	19990531
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002516899	T2	20020611	JP 2000-552084	19990531
NO 2000006116	A	20010202	NO 2000-6116	20001201

PRIORITY APPLN. INFO.:
SE 1998-1990 A 19980604
SE 1998-1991 A 19980604
SE 1998-1992 A 19980604
WO 1999-SE942 W 19990531

OTHER SOURCE(S): MARPAT 132:22756
GI



I

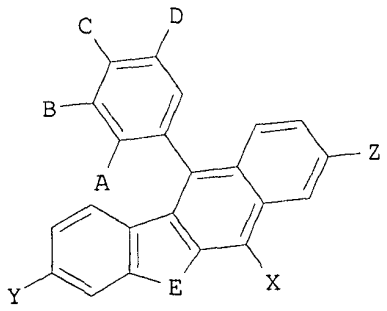
AB Prepn. of 3-arylpropionic acid derivs. and analogs I [A = CR3R4CR1R2COR, CR3:CR1COR; D = OSO2Rd, NRcRd, CN, etc.; D1 = H, alkyl, aryl, etc.; D2 = H, acyl, NO2, etc.; n = 1-3] and their use as treatment for insulin resistance are described. E.g., 2-ethoxy-3-[4-(2-{4-methanesulfonyloxyphenyl}ethoxy)phenyl]propanoic acid was prepd.

IT **2426-87-1**, 4-Benzyloxy-3-methoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of arylpropionic acids for treatment of **insulin** resistance)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:736689 HCAPLUS
DOCUMENT NUMBER: 131:351227
TITLE: Preparation of 11-aryl-benzo[b]naphtho[2,3-d]furans and 11-aryl-benzo[b]naphtho[2,3-d]thiophenes useful in the treatment of insulin resistance and hyperglycemia
INVENTOR(S): Wrobel, Jay Edward; Dietrich, Arlene Joan; Li, Zenan
PATENT ASSIGNEE(S): American Home Products Corp., USA
SOURCE: PCT Int. Appl., 209 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958521	A1	19991118	WO 1999-US10185	19990510
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330623	AA	19991118	CA 1999-2330623	19990510
AU 9939791	A1	19991129	AU 1999-39791	19990510
EP 1077970	A1	20010228	EP 1999-922897	19990510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
JP 2002514638	T2	20020521	JP 2000-548325	19990510

PRIORITY APPLN. INFO.: US 1998-76592 A 19980512
WO 1999-US10185 W 19990510
OTHER SOURCE(S): MARPAT 131:351227
GI



I

AB The title compds. [I; A = H, halo, OH; B, D = H, halo, CN, etc.; E = S, SO, SO2, O; X = H, halo, alkyl, etc.; Y, Z = H, OR2; R2 = H, alkyl, aralkyl, etc.; C = H, halo, OR4; R4 = H, alkyl, 5-thiazolidine-2,4-dione,

etc.] and their pharmaceutically acceptable salts, which are useful in treating metabolic disorders related to insulin resistance or hyperglycemia, were prepd. Thus, treatment of 4-benzo[b]naphtho[2,3-d]thiophen-11-ylphenol and KOAc in AcOH with a soln. of Br2 in glacial AcOH afforded I [E = S; Y = Z = H; X = Br; A = H; B = D = Br; C = OH] which showed IC50 of 0.384 .mu.M against human recombinant PTP1B.

IT **591-31-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 11-aryl-benzo[b]naphtho[2,3-d]furans and 11-aryl-benzo[b]naphtho[2,3-d]thiophenes useful in the treatment of **insulin** resistance and hyperglycemia)

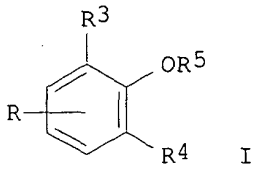
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:736685 HCAPLUS
DOCUMENT NUMBER: 131:351222
TITLE: Preparation of .alpha.-(biphenylyloxo)alkanoic acids for treatment of insulin resistance and hyperglycemia
INVENTOR(S): Malamas, Michael Sotirios; McDevitt, Robert Emmett; Adebayo, Folake Oluwemimo
PATENT ASSIGNEE(S): American Home Products Corporation, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

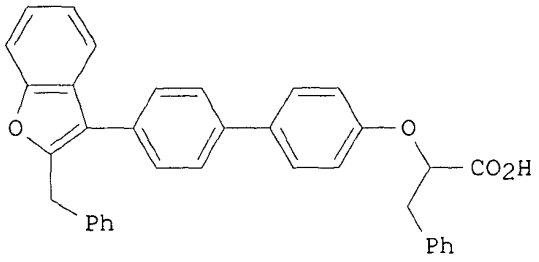
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958518	A2	19991118	WO 1999-US10201	19990510
WO 9958518	A3	20000120		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330557	AA	19991118	CA 1999-2330557	19990510
AU 9941836	A1	19991129	AU 1999-41836	19990510
EP 1077967	A2	20010228	EP 1999-925583	19990510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
JP 2002514635	T2	20020521	JP 2000-548322	19990510

PRIORITY APPLN. INFO.: US 1998-76205 A 19980512
WO 1999-US10201 W 19990510

OTHER SOURCE(S): MARPAT 131:351222
GI



I



II

AB Title compds. [I; R = 4-(R1Z1Z2)C6H4; R1 = (ar)alkyl, alkoxy, (hetero)aryl, etc.; Z1 = bond, CH2, CO, CH(OH); Z2 = (benz)imidazolylene, (benzo)furylene, thienylene, etc.; R3,R4 = H, halo, alkyl, alkoxy, etc.; R5 = H, alkyl, CH2CO2H, CHR8CH2CO2H, etc.; R8 = H, (ar)alkyl, aryl, etc.] were prepd. as protein-tyrosine phosphatase inhibitors. Thus, 4-BrC6H4COCH2Br was etherified by PhOH and the cyclized product condensed with 4-(MeO)C6H4B(OH)2 to give, after O-demethylation, 3-(4'-hydroxybiphenylyl)benzofuran which was acylated by BzNMeOMe and the reduced product etherified by (R)-PhCH2CH(OH)CO2Me to give, after sapon., title compd (S)-II. Data for biol. activity of I were given.

IT **120-14-9**, 3,4-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of .alpha.-(biphenylyloxo)alkanoic acids for treatment of **insulin** resistance and hyperglycemia)

L13 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:172597 HCAPLUS
DOCUMENT NUMBER: 130:209716
TITLE: Preparation of 2-vinyl-4-aminoquinazoline derivatives as insulin secretion promoters and antidiabetics
INVENTOR(S): Ueno, Kimihisa; Nomoto, Yuji; Takasaki, Kotaro; Yoshida, Miho; Kusaka, Hideaki; Yano, Hiroshi; Nakanishi, Satoshi; Matsuda, Yuzuru; Uesaka, Noriaki; Suzuki, Chiharu
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan; et al.
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909986	A1	19990304	WO 1998-JP3711	19980821
W: AU, BG, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RO, SG, SI, SK, UA, US, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9887487	A1	19990316	AU 1998-87487	19980821

PRIORITY APPLN. INFO.: JP 1997-225963 19970822
WO 1998-JP3711 19980821

OTHER SOURCE(S): MARPAT 130:209716
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Claimed are insulin secretion promoters and remedies for diabetes which contain as the active ingredient 2-vinyl-4-aminoquinazoline derivs. represented by general formula (I) or pharmacol. acceptable salts thereof [wherein R1A and R1B are the same or different and each represents hydrogen, lower alkyl, lower alkoxy, halogeno, nitro, NR3R4 (wherein R3 and R4 are the same or different and each represents hydrogen or lower alkyl), etc.; or R1A may form together with R1B adjacent thereto O(CH2)nO (wherein n is 1 or 2); Cy represents optionally substituted aryl; R2 represents hydrogen or optionally substituted lower alkyl; and A represents hydrogen or optionally substituted lower alkyl, optionally substituted cycloalkyl, etc.; or R2 and A may form together with the nitrogen atom adjacent thereto an optionally substituted heterocycle]. These compds. exhibited insulin secretion activity at high concn. of glucose (14.5 mM) but no substantial activity at low concn. of glucose (.ltoreq.5 mM). For comparison, glubenclamide did exhibit substantial insulin-secretion activity at low concn. of glucose. Thus, 7-chloro-7-methoxy-2-[2-(E)-(2,4-dimethoxyphenyl)vinyl]quinazoline was condensed with N-methylphenethylamine to give the title compd. (II). II in vitro showed insulin secretion activity of 3,413 ng/mL at 1 .mu.M under 14.5 mM glucose and 86 ng/mL at 10 .mu.M under 5 mM glucose in spleen .beta.-cells (MIN6)as compared to that of 684 ng/mL at 0.1 .mu.M under 14.5 mM glucose and 317 ng/mL at 0.1 .mu.M under 5 mM glucose for glubenclamide.

IT **93-02-7**, 2,5-Dimethoxybenzaldehyde **591-31-1**, m-Anisaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of vinylaminoquinazoline derivs. as **insulin** secretion promoters and antidiabetics)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:168719 HCAPLUS
DOCUMENT NUMBER: 131:18199
TITLE: Effect of .gamma.-radiation on the volatile oil constituents of some Indian spices
AUTHOR(S): Variyar, Prasad S.; Bandyopadhyay, C.; Thomas, P.
CORPORATE SOURCE: Food Technology Division, Bhabha Atomic Research Centre, Mumbai, 85, India
SOURCE: Food Research International (1999), Volume Date 1998, 31(2), 105-109
CODEN: FORIEU; ISSN: 0963-9969
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The volatile essential oils of com. samples of clove, cardamom and nutmeg gamma-irradiated at 10 KGy for microbial decontamination were isolated by simultaneous distn.-extn. technique and then analyzed by gas liq. chromatog. (GLC) along with their non-irradiated counterparts. No qual. and major quant. changes were obsd. in the essential oil constituents of irradiated clove and cardamom. However in case of irradiated nutmeg, a 6-fold increase in the content of myristicin accompanied by a decrease of similar magnitude in elemicin content was noted. The possible impact of such changes on the sensory properties of nutmeg is discussed.

IT **121-33-5**, Vanillin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effect of .gamma.-**radiation** on volatile oil constituents of Indian spices)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:735784 HCAPLUS
DOCUMENT NUMBER: 129:335009
TITLE: Kinetics of the elimination of vanillin by UV radiation catalyzed with hydrogen peroxide
AUTHOR(S): Benitez, F. Javier; Beltran-Heredia, Jesus; Gonzalez, Teresa; Real, Francisco
CORPORATE SOURCE: Departamento Ingenieria Quimica Energetica, Univ. Extremadura, Badajoz, E-06071, Spain
SOURCE: Fresenius Environmental Bulletin (1998), 7(11/12), 726-733
CODEN: FENBEL; ISSN: 1018-4619
PUBLISHER: Fresenius Environmental Bulletin
DOCUMENT TYPE: Journal
LANGUAGE: English

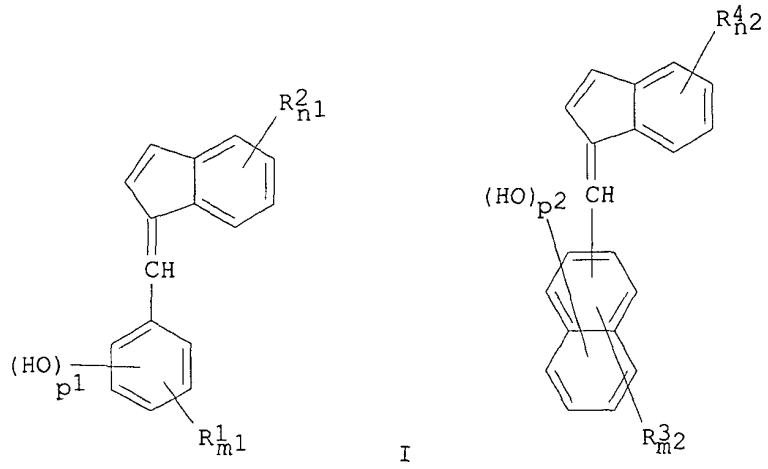
AB The photodegrdn. of vanillin, the major phenolic pollutant in agro-industrial wastewater by the advanced oxidn. process, was carried out in a cylindrical glass reactor with a lamp located in axial position. The reactor was thermostated at the desired temp. for detn. of the temp. dependence of the reaction rate. The combined UV-H2O2 degrdn. was performed under variation of temp., pH, and the initial H2O2 concn. The results of the kinetic investigations allowed to propose a reaction mechanism and a general reaction expression taken into account the direct photolysis and the radical reaction. The application of the exptl. data to this reaction rate expression led to the evaluation of the kinetic consts. for the radical reaction between vanillin and the hydroxyl radical.

IT **121-33-5**, Vanillin
RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)
(kinetics of vanillin elimination in wastewater by UV **radiation** and hydrogen peroxide)

L13 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:424549 HCAPLUS
DOCUMENT NUMBER: 129:142605
TITLE: Radiation-sensitive photoresist compositions with less standing wave effect and halation
INVENTOR(S): Inomata, Katsuki; Akiyama, Masahiro; Iwanaga, Shinichiro
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10177248	A2	19980630	JP 1996-353287	19961217

OTHER SOURCE(S): MARPAT 129:142605
GI



I II

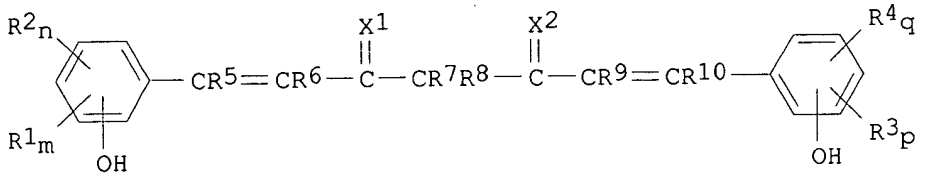
AB The compns., useful for fabrication of integrated circuits, comprise alkali-sol. resins, I and/or II [R1-4 = alkyl (oxy), aryl; m1, m2 = 0-3; n1, n2 = 0-2; p1, p2 = 1-3; (m1 + p1) = 1-5; (m2 + p2) = 1-8], and 1,2-quinonediazide compds.

IT **121-33-5**, Vanillin
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of phenol or naphthol derivs. for **radiation** -sensitive photoresist components)

L13 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:175833 HCAPLUS
DOCUMENT NUMBER: 128:237219
TITLE: Radiation-sensitive resin composition
INVENTOR(S): Hirose, Kouichi; Akiyama, Masahiro; Inomata, Katsumi; Yumoto, Yoshiji
PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 827024	A2	19980304	EP 1997-114862	19970827
EP 827024	A3	19980513		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10133366	A2	19980522	JP 1997-246172	19970827
US 5958645	A	19990928	US 1997-917727	19970827

PRIORITY APPLN. INFO.: JP 1996-245535 19960828
OTHER SOURCE(S): MARPAT 128:237219
GI



I

AB A radiation-sensitive resin compn. including; (i) an alkali-sol. resin; (ii) a phenol compd. represented by the following formula (I): wherein R1 to R4 are each represent halogen, alkyl, alkoxy, aryl, nitro, cyano, hydroxyalkyl, hydroxy alkoxy or hydroxyl; m, n, p and q each represent an integer of 0 to 4 and satisfying 0 .ltoreq. m+n .ltoreq. 4 and 0 .ltoreq. p+q .ltoreq. 4, provided that when m + n is 1 and p + q is 1, at least one of R1 (or R2) and R3 (or R4) is alkyl, hydroxyalkyl or hydroxy alkoxy; R5 to R10 are each represent hydrogen, alkyl or aryl; and X1 and X2 each represent oxygen or sulfur; and (iii) a 1,2-quinone diazide compd. This compn. has good resoln., sensitivity and developability, and further it has as a pos. resist good focal latitude and heat resistance. No fine particles may form during storage.

IT **134-96-3**, 3,5-Dimethoxy-4-hydroxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenol compd. for **radiation** sensitive resin compn.)

L13 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:137214 HCAPLUS
DOCUMENT NUMBER: 128:267747
TITLE: Protective effect of vanillin on radiation-induced micronuclei and chromosomal aberrations in V79 cells
AUTHOR(S): Keshava, Channa; Keshava, Nagalakshmi; Ong, Tong-man; Nath, Joginder
CORPORATE SOURCE: College of Agriculture and Forestry, Genetics and Developmental Biology Program, West Virginia University, Morgantown, WV, 26506-6108, USA
SOURCE: Mutation Research (1998), 397(2), 149-159
CODEN: MUREAV; ISSN: 0027-5107
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Vanillin (VA), an anticlastogen, has been demonstrated to inhibit gene mutations in both bacterial and mammalian cells. However, the data on its effect against radiation-induced cytogenetic damage are limited. The aim of this study was to investigate the protective effect of VA on radiation-induced chromosomal damage in V79 cells. Exponentially growing cells were exposed to five doses of X-rays (1-12 Gy) and UV radiation (50-800 .mu.J.times.102 cm-2) and posttreated with 3 concns. of VA (5, 50 or 100 .mu.g ml-1) for 16 h for micronucleus (MN) and 18 h for structural chromosomal aberration (SCA) analyses. MN and SCA assays were performed concurrently according to std. procedures. Results indicate that there was a dose related increase in the percent of micronucleated binucleated cells (MNBN) (5.6 to 79.6) and percent of aberrant cells (Abs) (12 to 98) with X-ray treatment alone. Inhibition studies showed that the addn. of VA at 100 .mu.g ml-1 significantly reduced the percent of MNBN (21 to 48) induced by X-rays at 1, 2, and 4 Gy. There was a slight decrease in percent MNBN at 5 and 50 .mu.g VA ml-1. All three concns. of VA decreased percent Abs (15.7 to 57.1) induced by X-rays at all doses. UV radiation alone significantly increased percent MNBN (3.5 to 14.8) and percent Abs (17 to 29). Addn. of 50 or 100 .mu.g VA ml-1, significantly decreased percent MNBN (31.7 to 86.2) and percent Abs (54.5 to 90.9) at all doses of

UV radiation. A decrease in percent MNBN (2.8 to 72.4) and percent Abs (34.8 to 66.7) was also noted at 5 .mu.g VA ml-1. These data clearly indicate the protective effect of VA on radiation-induced chromosomal damage, suggesting that VA is an anticlastogenic agent.

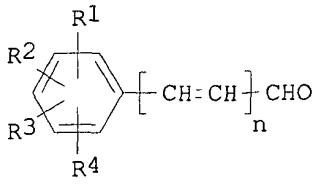
IT **121-33-5**, Vanillin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vanillin protective effect on **radiation**-induced micronuclei and chromosomal aberrations)

L13 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:87808 HCAPLUS
DOCUMENT NUMBER: 128:158724
TITLE: Oxidative dyes containing aldehydes for keratin-containing fibers
INVENTOR(S): Moeller, Hinrich; Hoeffkes, Horst
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19630275	A1	19980129	DE 1996-19630275	19960726
EP 820759	A2	19980128	EP 1997-112194	19970717
EP 820759	A3	19981021		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: DE 1996-19630275 19960726
OTHER SOURCE(S): MARPAT 128:158724
GI



I

AB Direct hair dyes contg. an aldehyde I (R1-R4 = H, halo, C1-4 alkyl or alkoxy, C2-4 hydroxyalkyl, C1-4 aminoalkyl, NO2, CO2H, SO3H, etc.; n = 0, 1) and a dye precursor comprising a primary or secondary arom. amine, an N-contg. heterocycle, an arom. hydroxy compd., an amino acid, and/or an oligopeptide may be used either with or without addn. of oxidizing agents such as H2O2. In either case, the dyes show excellent color intensity in a wide range of color nuances from yellowish-orange to brownish-black, excellent color fastness, and very low sensitizing potential. Thus, a soln. contg. equal parts of 2,3,4-trihydroxybenzaldehyde and 2-aminomethyl-4-aminophenol-Dihydrochloride produced a strong brownish-orange color on gray hair.

IT **121-33-5**, Vanillin
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative dyes contg. aldehydes for **keratin**-contg. fibers)

L13 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:217387 HCAPLUS
DOCUMENT NUMBER: 126:279275
TITLE: Spectroscopic and catalytic studies of selected polyimines protonated with heteropolyacids
AUTHOR(S): Stochmal-Pomarzanska, E.; Quillard, S.; Hasik, M.; Turek, W.; Pron, A.; Lapkowski, M.; Lefrant, S.
CORPORATE SOURCE: Academy of Mining and Metallurgy, Mickiewicza 30, Krakow, 30059, Pol.
SOURCE: Synthetic Metals (1997), 84(1-3), 427-428
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Arom. poly(azomethines), prepd. from p-phenylenediamine and terephthalaldehyde or 2,5-dimethoxyterephthalaldehyde, have been protonated with heteropolyacids (H3PW12O40 and H3PMo12O40) in order to obtain new conjugated polymer-supported catalysts. Detailed Raman and FTIR spectroscopic studies of the undoped and doped polymers have been performed. In isopropanol dehydration and oxidn., these new catalysts exhibit predominantly redox activity producing acetone with high selectivity.
IT **135789-41-2**
RL: CAT (Catalyst use); PRP (Properties); USES (Uses)
(spectroscopic and **isopropanol** dehydration and oxidn. catalytic studies of polyazomethines protonated with heteropolyacids)

L13 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:420298 HCAPLUS
DOCUMENT NUMBER: 125:195563
TITLE: Synthesis and radiation stability of novel thiazolopyrimidines with expected antifungal activity
AUTHOR(S): Ghorab, m. M.; Mohamed, Y. A.; Mohamed, S. A.; Ammar, Y. A.
CORPORATE SOURCE: Dep. Drug Radiation Res., Atomic Energy Authority, Cairo, Egypt
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1996), 108(1-4), 249-256
CODEN: PSSLEC; ISSN: 1042-6507
PUBLISHER: Gordon & Breach
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A no. of thiazolopyrimidines were prepd. through interaction of 6-methyl-4-(4'-chlorophenyl)-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carboxylic acid Et ester with many reagents. The antifungal activity of all prepd. compds. have been detd. using Dithane M-45 as a std. fungicide. Some compds. showed a high fungicidal activity equiv. to that of the std. towards Aspergillus niger and Aspergillus ochraceus. Also some biol. active compds. were subjected to gamma irradn. and the structures are stable.
IT **120-14-9**, 3,4-Dimethoxybenzaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and **radiation** stability of fungicidal thiazolopyrimidines)

L13 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:898953 HCAPLUS
DOCUMENT NUMBER: 123:284214
TITLE: Collagen-based edible film for food packaging
INVENTOR(S): Peiffer, Bernd; Keil, Joachim; Maser, Franz
PATENT ASSIGNEE(S): Naturin GmbH und Co., Germany
SOURCE: Ger. Offen., 4 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4343670	A1	19950622	DE 1993-4343670	19931221
US 5736180	A	19980407	US 1995-507242	19951113
PRIORITY APPLN. INFO.:			DE 1993-4343670	19931221
			WO 1994-EP3395	19941014

AB A collagen-based edible film contg. a finely divided spice for food packaging is claimed. The film can also contain coloring, aroma and flavoring materials. Paprika powder was mixed at 1% with a collagen suspension and extruded to 20 .mu.m thickness, dried, and reconditioned to be used as a film for coating raw ham.

IT **121-33-5**, Vanillin
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(**collagen**-based edible film for food packaging)

L13 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:482620 HCAPLUS
DOCUMENT NUMBER: 121:82620
TITLE: Synthesis of vanillin by ultrasonic radiation and phase transfer catalysis
AUTHOR(S): Jiang, Yuren; Xu, Junhuang
CORPORATE SOURCE: Dep. Chem., Cent. South Univ. Technol., Changsha, 410083, Peop. Rep. China
SOURCE: Zhongnan Kuangye Xueyuan Xuebao (1994), 25(1), 132-6
CODEN: CKYPDO; ISSN: 0253-4347
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
OTHER SOURCE(S): CASREACT 121:82620

AB The application of synergistic technol. of ultrasonic radiation and phase transfer catalysis in Reimer-Tiemann reaction was studied for the first time and the effect of factors on reaction was also investigated. By using PEG-6000 as PTC with 2 h of ultrasonic radiation, vanillin was synthesized in 39.2% yield from guaiacol in solid-liq. phase. Not only was yield of vanillin 7.2% higher but the reacting time was also shortened to half in comparison with the best results of the study on the same reaction.

IT **121-33-5P**, Vanillin
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, from guaiacol by ultrasonic **radiation** and phase transfer catalysis)

L13 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:207918 HCAPLUS
DOCUMENT NUMBER: 120:207918
TITLE: Comparative molecular field analysis combined with physicochemical parameters for prediction of polydimethylsiloxane membrane flux in isopropanol
AUTHOR(S): Liu, Rong; Matheson, Lloyd E.
CORPORATE SOURCE: Lederle lab., Am. Cyanamid Co., Pearl River, NY, 10965, USA
SOURCE: Pharm. Res. (1994), 11(2), 257-66
CODEN: PHREEB; ISSN: 0724-8741
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Comparative mol. field anal. (CoMFA) combined with various physicochem. parameters were used to develop 3-dimensional quant. structure-transportability relationships (3-D QSTR) to predict membrane flux for 108

arom. and heteroarom. compds. through polydimethylsiloxane (PDMS) membranes in iso-Pr alc. (IPA). Sybyl, a comprehensive computational mol. modeling package, was used to analyze the data. Optimized mol. models were selected using mol. modeling techniques. Partial least-squares (PLS) regression combined with cross validation or bootstrapping was used as the statistical method to establish the predictive models. Prediction was good for the steady-state flux using both steric and electrostatic field descriptors combined with a functional group classification technique. Predictive ability was substantially increased in a model using CoMFA descriptors along with log mole fraction soly. for the penetrants in isopropanol, a hydrophobic term, fchex, which is used to est. the partition coeff. between cyclohexane and water, and the addn. of an intramol. hydrogen bonding (1HB) term. The cross validated r2 and the conventional r2 for this model were 0.951 and 0.973, resp. Excellent predictions are demonstrated for the membrane flux of the compds. both inside and outside the data domain.

IT **591-31-1**, m-Anisaldehyde
RL: BIOL (Biological study)
(membrane flux through polydimethylsiloxane in **isopropanol** of, QSAR of)

L13 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:456147 HCAPLUS
DOCUMENT NUMBER: 119:56147
TITLE: Sustained-release implants containing somatotropin complexes with aromatic aldehydes
INVENTOR(S): Clark, Michael T.; Gyurik, Robert J.; Lewis, Sharon K.; Murray, Marianne C.; Raymond, Matthew J.
PATENT ASSIGNEE(S): SmithKline Beecham Corp., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5198422	A	19930330	US 1992-896958	19920611
IL 105958	A1	19971120	IL 1993-105958	19930608
ZA 9304100	A	19940610	ZA 1993-4100	19930610
WO 9325222	A1	19931223	WO 1993-US5659	19930611
W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9345354	A1	19940104	AU 1993-45354	19930611
AU 670805	B2	19960801		
CN 1085804	A	19940427	CN 1993-108908	19930611
CN 1069214	B	20010808		
EP 644770	A1	19950329	EP 1993-915333	19930611
EP 644770	B1	19990107		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 68917	A2	19950828	HU 1994-3548	19930611
JP 07508003	T2	19950907	JP 1994-501768	19930611
JP 3247380	B2	20020115		
CA 2137677	C	19980825	CA 1993-2137677	19930611
AT 175355	E	19990115	AT 1993-915333	19930611
ES 2125990	T3	19990316	ES 1993-915333	19930611
PL 175971	B1	19990331	PL 1993-306726	19930611
NO 9404782	A	19941209	NO 1994-4782	19941209

PRIORITY APPLN. INFO.: US 1992-896958 A 19920611
WO 1993-US5659 A 19930611

OTHER SOURCE(S): MARPAT 119:56147

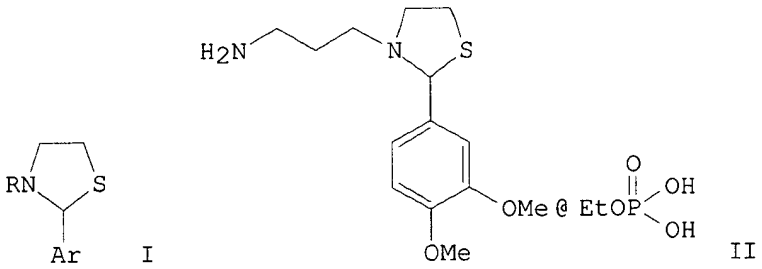
AB Somatotropin (I) complexes with an arom. aldehyde are administered parenterally to animals to provide a prolonged release of I and improved feed efficiency. Thus, soln. of porcine I was reacted with 2-hydroxy-3-methoxy benzaldehyde (II) at 39.degree. for 6-24 h to obtain I-II complex. Pellets contg. I complex were implanted s.c. in pigs. There was a sustained plasma I level and increase over the control in both the av. daily gain and feed-to-gain ratio.

IT **148696-71-3 148696-72-4**
RL: BIOL (Biological study)
(sustained-release parenteral pharmaceutical implants contg.)

L13 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:583275 HCAPLUS
DOCUMENT NUMBER: 115:183275
TITLE: Preparation of 3-(aminoalkyl)-2-arylthiazolidines as radioprotectants
INVENTOR(S): Lyle, Robert E.; McManon, William A.; Mangold, Donald J.; Swynnerton, Nollie F.
PATENT ASSIGNEE(S): Southwest Research Institute, USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5028715	A	19910702	US 1989-306922	19890206

OTHER SOURCE(S): MARPAT 115:183275
GI



AB Title compds. [I; R = aminoalkyl; Ar = (halo-, O2N-, alkoxy-, alkyl-, or 3,4-alkylenedioxy-substituted) Ph], were prepd. Thus, a mixt. of 3,4-(MeO)2C6H3CHO, H2N(CH2)3NHCH2CH2SPO3H2, and EtOH was stirred with heating for 48 h to give title compd. II. II at 54.3 mg/kg i.p. in mice gave 100% protection against 1000 rad .gamma.-radiation, and showed no drug-related lethality at that dose.

IT **120-14-9**, 3,4-Dimethoxybenzaldehyde **591-31-1**, m-Methoxybenzaldehyde
RL: RCT (Reactant)
(cyclocondensation of, with aminoethylthiophosphate, in prepn. of **radioprotectants**)

L13 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:402644 HCAPLUS
DOCUMENT NUMBER: 113:2644
TITLE: Suppressing effects of vanillin, cinnamaldehyde, and

anisaldehyde on chromosome aberrations induced by x-rays in mice
AUTHOR(S): Sasaki, Yu F.; Ohta, Toshihiro; Imanishi, Hisako; Watanabe, Mie; Matsumoto, Kyomu; Kato, Tomoko; Shirasu, Yasuhiko
CORPORATE SOURCE: Inst. Environ. Toxicol., Kodaira, 187, Japan
SOURCE: Mutat. Res. (1990), 243(4), 299-302
CODEN: MUREAV; ISSN: 0027-5107
DOCUMENT TYPE: Journal
LANGUAGE: English
AB X-ray-induced chromosome aberrations were suppressed when vanillin, cinnamaldeyde, or p-anisaldehyde was given orally to mice after x-ray irradn. Chromosome aberrations were monitored by the occurrence of polychromatic erythrocytes with micronuclei in bone marrow cells. The frequency of micronuclei was depressed .apprx.55-60% without toxicity of the test compds. to the bone marrow.
IT **121-33-5**
RL: BIOL (Biological study)
(**radioprotection** by, of chromosome aberrations in bone marrow cells induction by x-rays)

L13 ANSWER 34 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:194543 HCAPLUS
DOCUMENT NUMBER: 112:194543
TITLE: Suppressing effect of antimutagenic flavorings on chromosome aberrations induced by UV-light or x-rays in cultured Chinese hamster cells
AUTHOR(S): Sasaki, Yu F.; Imanishi, Hisako; Watanabe, Mie; Ohta, Toshihiro; Shirasu, Yasuhiko
CORPORATE SOURCE: Inst. Environ. Toxicol., Tokyo, 187, Japan
SOURCE: Mutat. Res. (1990), 229(1), 1-10
CODEN: MUREAV; ISSN: 0027-5107
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chromosome aberrations induced by UV light or x-rays were suppressed by the post-treatment with antimutagenic flavorings, such as anisaldehyde, cinnamaldehyde, coumarin, and vanillin. UV- or x-irradiating surviving cells increased in the presence of each flavoring. X-ray-induced breakage-type and exchange-type chromosome aberrations were suppressed by the vanillin treatment in the G1 phase of the cell cycle and a greater decrease in the no. of x-ray-induced chromosome aberrations during G1 holding was obsd. in the presence of vanillin. Furthermore, a greater decrease in the no. of x-ray-induced DNA single-strand breaks was obsd. in the presence of vanillin. Treatment with vanillin in the G2 phase suppressed UV- and x-ray-induced breakage-type but not exchange-type chromosome aberrations. The suppression of breakage-type aberrations was assumed to be due to a modification of the capability of the post-replicational repair of DNA double-strand breaks. These G1- and G2-dependent anticlastogenic effects were not obsd. in the presence of 2',3'-dideoxythymidine, an inhibitor of DNA polymerase .beta.. Based on these results, the anticlastogenic effect of vanillin was considered to be due to the promotion of the DNA rejoining process in which DNA polymerase .beta. acts.
IT **121-33-5**
RL: BIOL (Biological study)
(chromosome aberrations in CHO cells induction by UV **radiation** and x-rays suppression by)

L13 ANSWER 35 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:211071 HCAPLUS
DOCUMENT NUMBER: 108:211071
TITLE: Effect of gamma-irradiation on the uncatalyzed bromate oscillator

AUTHOR(S): Krishnaratnam, M.; Viswanathan, B.; Ramaswamy, R.
CORPORATE SOURCE: Dep. Chem., Indian Inst. Technol., Madras, 600 036, India
SOURCE: J. Radioanal. Nucl. Chem. (1988), 120(2), 353-9
CODEN: JRNCDM; ISSN: 0236-5731
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The characteristics of the uncatalyzed BrO3- oscillator are altered in the presence of .gamma. radiation. These alterations could not be accounted for in terms of substrates acting as scavengers for H atoms. The alteration of the effective activity of the key species in the presence of .gamma.-irradn. can account for the changes obsd. in the oscillation characteristics.
IT **120-14-9**, Veratraldehyde
RL: RCT (Reactant)
(oscillating reaction of, with bromate, effect of .gamma.-**radiation** on)

L13 ANSWER 36 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:511139 HCAPLUS
DOCUMENT NUMBER: 105:111139
TITLE: Radioprotective and antitumor activity of some tetrazole derivatives
AUTHOR(S): Kitaeva, V. G.; Ishmetova, R. I.; Latosh, N. I.; Malkina, R. M.; Anoshina, G. M.
CORPORATE SOURCE: Inst. Khim., Sverdlovsk, USSR
SOURCE: Khim.-Farm. Zh. (1986), 20(5), 559-63
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Nine N1(N2), C5-substituted tetrazoles were prepd. and their toxicities, radioprotective activities, and antitumor activities were detd. The derivs., which had LD50 values of 850-2000 mg/kg, were less toxic than the parent 5-substituted tetrazoles. The majority of the compds. showed no radioprotective activity, as detd. by the survival rates of mice exposed to LDs of radiation for 30 days. However, 1-(3,5-dimethyl-4-hydroxybenzyl)-5-(4-pyridyl)tetrazole was an efficient radioprotectant; a survival rate of 46.5% was obtained with this compd. With the exception of 2-(3,5-dimethyl-4-hydroxybenzyl)-5-(3-pyridyl)tetrazole, which inhibited the growth of sarcoma 37 by 65%, the compds. possessed no significant antitumor activities, and, in some cases, actually stimulated tumor growth.
IT **104065-29-4 104065-31-8**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(toxicity and other properties of, antitumor and **radioprotective** activities in relation to)

L13 ANSWER 37 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:125733 HCAPLUS
DOCUMENT NUMBER: 104:125733
TITLE: Antimutagenic effects of 5-fluorouracil and 5-fluorodeoxyuridine on UV-induced mutagenesis in Escherichia coli
AUTHOR(S): Ohta, T.; Watanabe, M.; Tsukamoto, R.; Shirasu, Y.; Kada, T.
CORPORATE SOURCE: Inst. Environ. Toxicol., Tokyo, 187, Japan
SOURCE: Mutat. Res. (1986), 173(1), 19-24
CODEN: MUREAV; ISSN: 0027-5107
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Inhibitors of UV induction of the SOS function were screened. A log phase culture of E. coli PQ37 (sulA::lacZ, rfa, uvrA, Phoc) was irradiated with UV and then immediately subjected to culture for 2 h in a liq. LB medium

contg. each test compd. Expression of the SOS gene (sulA) was assayed by monitoring the levels of .beta.-galactosidase. To examine the inhibitory effects of test compds. on protein synthesis, the levels of the constitutive alk. phosphatase were assayed in parallel. The total no. of compds. tested was 233, including 44 food and feed additives, 23 naturally occurring compds. and derivs., 21 antibiotics, 61 pesticides, 33 inorgs., and 51 other chems. As a result, 5-fluorouracil and 5-fluorodeoxyuridine were found to inhibit considerably the UV induction of the SOS gene without any inhibition of protein synthesis. Mutagenesis induced by UV irradn. was depressed by the addn. of either compd. at nontoxic concns.

IT **121-33-5**
RL: BIOL (Biological study)
(mutation of Escherichia coli induction by UV **radiation** in response to)

L13 ANSWER 38 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:505370 HCAPLUS
DOCUMENT NUMBER: 103:105370
TITLE: Poly[4,4'[2,5-bis(4-oxy-3-methoxybenzylidene)cyclopentanone]phenylphosphonate] and related photosensitive polycondensates. {Poly[oxy(phenylphosphonoyl)oxy(2-methoxy-1,4-phenylene)methylidyne(2-oxo-1,3-cyclopentanediylidene)methylidyne(3-methoxy-1,4-phenylene)]}
AUTHOR(S): Borden, D. G.
CORPORATE SOURCE: Res. Lab., Eastman Kodak Co., Rochester, NY, USA
SOURCE: Macromol. Synth. (1985), 9, 5-10
CODEN: MASYAO; ISSN: 0076-2091
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 2,5-Bis(4-hydroxy-3-methoxybenzylidene)cyclopentanone (I) [7249-34-5] was prepd. by treating vanillin [**121-33-5**] with cyclopentanone [120-92-3] in the presence of BF3.OEt2 and polymd. with PhP(O)Cl2 or azelaoyl chloride to give a photocurable polyphosphonate (II) [97876-83-0] and polyester (III) [97876-84-1], resp. I was also polymd. with tetrachlorobisphenol A and sebacoyl chloride to give a photocurable terpolymer [66509-29-3] having intrinsic viscosity 1.09 dL/g (in CH2ClCHCl2) and UV absorption max. at 363 nm. III had intrinsic viscosity 0.66 dL/g, av. mol. wt. 58,684, polydispersity 12.54, UV absorption max. at 375 nm, and the same degree of crosslinking as II with approx. one-tenth the exposure to UV **radiation**.

L13 ANSWER 39 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:529328 HCAPLUS
DOCUMENT NUMBER: 97:129328
TITLE: Organic compounds in kraft bleaching spent liquors. V. Photodegradation of red-pine chlorinated oxylignin
AUTHOR(S): Shimada, Kinji
CORPORATE SOURCE: Div. For. Prod. Chem., For. For. Prod. Res. Inst., Ibaraki, 305, Japan
SOURCE: Mokuzai Gakkaishi (1982), 28(6), 376-82
CODEN: MKZGA7; ISSN: 0021-4795
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The degrdn. of chlorinated oxylignin (I) in NaOH soln. with UV light in the presence of O increased with increasing pH and resulted in the formation of low-mol.-wt. compds. with accompanying dechlorination, demethoxylation, and cleavage of the arom. rings and in the redn. of COD of I solns. Upon UV irradn. in the presence of N, no redn. of COD and cleavage of arom. rings were obsd., but Cl and methoxy groups were removed, the color of the I soln. became dark, and the I was polymd. slightly. In the methoxy group-contg. chlorinated model compds. for

lignin, the cleavage of C-Cl bonds in the presence of N promoted a demethoxylation reaction.

IT **18268-76-3 19463-48-0 82668-20-0**
RL: PRP (Properties)
(degrdn. of, by UV **radiation**, as model compd. for chlorinated oxylignin)

L13 ANSWER 40 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:7842 HCAPLUS
DOCUMENT NUMBER: 90:7842
TITLE: Effect of cobalt-60 .gamma.-radiation on a sprucewood lignocarbohydrate complex, coniferin, and glucovanillin
AUTHOR(S): Sergeeva, V. N.; Kreicberga, Z.; Ekabsome, M.; Rajavee, E.; Muiznieks, A.
CORPORATE SOURCE: Inst. Khim. Drev, Riga, USSR
SOURCE: Khim. Drev. (1978), (5), 58-67
CODEN: KHDRDQ
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Lignin (I) [9005-53-2]-carbohydrate bonds in sprucewood lignin-carbohydrate complexes and phenylglucoside bonds in glucovanillin (II) [494-08-6] and coniferin (III) [531-29-3] are resistant to .gamma.-ray irradn. from a 60Co source at doses of 5-50 Mrads. The irradn. of II and III with a dose of 50 Mrads does not affect the resistance of phenylglucoside bond to acid hydrolysis. The protective effect of I with respect to carbohydrates in sprucewood lignin-carbohydrate complexes is obsd. during irradn. with doses of 50 Mrads, but the protective effect of I decreases with increasing irradn. dose. The irradn. of lignin-carbohydrate complexes with doses >50 Mrads causes condensation.

IT **494-08-6**
RL: PRP (Properties)
(**radiation** resistance of)

L13 ANSWER 41 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:431632 HCAPLUS
DOCUMENT NUMBER: 87:31632
TITLE: New nonlinear organic materials for generation of second harmonics of neodymium laser radiation
AUTHOR(S): Davydov, B. L.; Kotovshchikov, S. G.; Nefedov, V. A.
CORPORATE SOURCE: Inst. Radioelektron., Moscow, USSR
SOURCE: Kvantovaya Elektron. (Moscow) (1977), 4(1), 214-20
CODEN: KVEKA3
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Results are presented of studies into the Nd laser 2nd harmonic generation in 36 org. cryst. powders. Possible approaches are discussed to the search and synthesis of nonlinear org. materials and the field of their application.

IT **121-33-5**
RL: PRP (Properties)
(laser **radiation** second harmonic generation in)

L13 ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:508714 HCAPLUS
DOCUMENT NUMBER: 83:108714
TITLE: Use of a hypothetical receptor-site model to predict novel pituitary hormone releasing and inhibiting agents
AUTHOR(S): Smythe, G. A.; Lazarus, L.
CORPORATE SOURCE: Garvan Inst. Med. Res., St. Vincent's Hosp., Sydney, Aust.

SOURCE: Hypothal. Hypophysiotropic Horm., Proc. Conf. (1973), Meeting Date 1972, 189-97. Editor(s): Gual, Carlos; Rosemberg, Eugenia. Excerpta Med.: Amsterdam, Neth. CODEN: 30PKAE
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A hypothetical hypothalamic receptor-site model able to bind mol. models of compds. which can affect the catechol amine-dependent release of pituitary hormones was proposed. The hypothesis enabled the prediction of compds. which antagonize or enhance brain catechol amine action and thus adenohypophysial secretion. Effects of various compds. arrived at from mol. model-receptor site model considerations were tested in rats by measuring serum and pituitary levels of prolactin and growth hormone after administration of the test compds. Acute administration of L-DOPA [59-92-7], 3-iodo-L-tyrosine [70-78-0], guaiacol [90-05-1], and 3,4-dimethoxyphenylacetamide [5663-56-9] suppressed serum prolactin [**9002-62-4**] levels. Vanillin [**121-33-5**] and 3,4-dimethoxy-L-phenylalanine [32161-30-1] blocked the prolactin-suppressing effect of L-DOPA. Vanillin also decreased the effect of L-DOPA on growth hormone [**9002-72-6**] secretion. 3,4-Dimethoxy-L-phenylalanine given chronically caused pituitary gland atrophy and decreased growth hormone and prolactin content. 3-Iodo-L-tyrosine and guaiacol given chronically decreased pituitary prolactin levels but increased pituitary wt. Compds. predicted from the model may find a role in treatment of hypothalamic disease states.

L13 ANSWER 43 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:499482 HCAPLUS
DOCUMENT NUMBER: 83:99482
TITLE: Model for the reaction of lignin with urea
AUTHOR(S): Malyutina, G. I.; Nitryushkina, O. I.
CORPORATE SOURCE: USSR
SOURCE: Sb. Stud. Nauchno-Issled. Rab., Arkhang. Lesotekh. Inst. (1974), 9, 87-90
CODEN: SSLKA3
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The reaction of vanillin (I) [**121-33-5**] with urea (II) [**57-13-6**] at 150-180.degree. (conditions of the particle board bonding with the urea-formaldehyde resins) gave a product contg. no CO groups, fewer mole% of the phenolic OH groups than I, and more secondary OH groups than it was expected from the I and II reaction. 4-HO,3-MeOC6H3CH:NCONH2, could be formed in reaction of I with II.

L13 ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:479472 HCAPLUS
DOCUMENT NUMBER: 77:79472
TITLE: Nuclear magnetic resonance (NMR) and fragrance materials
AUTHOR(S): Lemberg, Seymour
CORPORATE SOURCE: Coeurarome, Inc., Elizabeth, N. J., USA
SOURCE: Amer. Cosmet. Perfum. (1972), 87(6), 38-41
CODEN: ACPFB5
DOCUMENT TYPE: Journal
LANGUAGE: English
AB NMR is used to detect interaction of fragrances with the system in which they are being used, esp. proteins. Proteins were utilized in a D2O soln. to broaden selectively the NMR signal of various fragrances (vanillin, phenethyl alc., hydroxycitronellal, coumarin, geranyl acetate, and linalool). Nonaq. media could also be used. H2O could not be used, because of conflicting signals.
IT **121-33-5**
RL: RCT (Reactant)

(reactions of, with **collagen** proteins, NMR of)

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Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L15 27 L14 AND L2

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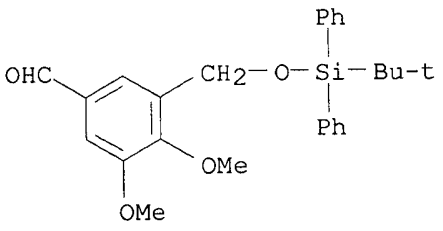
L15 ANSWER 1 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **334016-42-1** REGISTRY
CN Benzaldehyde, 3-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-4,5-dimethoxy- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H30 O4 Si
SR CA
LC STN Files: CA, CAPLUS



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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:295620

L15 ANSWER 2 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **148696-72-4** REGISTRY
CN Somatotropin (swine), compd. with 4-hydroxy-3-methoxybenzaldehyde (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzaldehyde, 4-hydroxy-3-methoxy-, compd. with somatotropin (swine) (9CI)
CN Benzaldehyde, 4-hydroxy-3-methoxy-, compd. with somatotropin (pig)
CN Somatotropin (pig), compd. with 4-hydroxy-3-methoxybenzaldehyde
MF C8 H8 O3 . x Unspecified
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 126467-48-9
CMF Unspecified
CCI MAN

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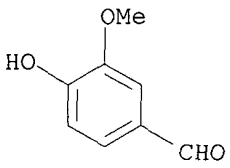
CM 2

CRN 121-33-5
CMF C8 H8 O3



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:56147

L15 ANSWER 3 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **148696-71-3** REGISTRY
CN Somatotropin (swine), compd. with 2-hydroxy-3-methoxybenzaldehyde (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzaldehyde, 2-hydroxy-3-methoxy-, compd. with somatotropin (pig)
CN Benzaldehyde, 2-hydroxy-3-methoxy-, compd. with somatotropin (swine) (9CI)
CN Somatotropin (pig), compd. with 2-hydroxy-3-methoxybenzaldehyde
MF C8 H8 O3 . x Unspecified
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

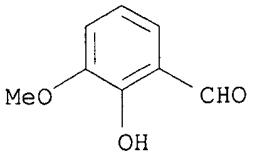
CRN 126467-48-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 148-53-8

CMF C8 H8 O3



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

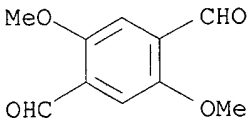
REFERENCE 1: 119:56147

L15 ANSWER 4 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **135789-41-2** REGISTRY
CN 1,4-Benzenedicarboxaldehyde, 2,5-dimethoxy-, polymer with 1,4-benzenediamine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4-Benzenediamine, polymer with 2,5-dimethoxy-1,4-benzenedicarboxaldehyde (9CI)
OTHER NAMES:
CN 2,5-Dimethoxyterephthalaldehyde-1,4-phenylenediamine copolymer
MF (C10 H10 O4 . C6 H8 N2)x
CI PMS, COM
PCT Polyazomethine, Polyazomethine formed
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED POLYMERS AVAILABLE WITH POLYLINK

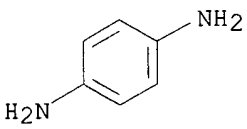
CM 1

CRN 7310-97-6
CMF C10 H10 O4



CM 2

CRN 106-50-3
CMF C6 H8 N2



12 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:321578

REFERENCE 2: 133:287090

REFERENCE 3: 132:222139

REFERENCE 4: 131:299966

REFERENCE 5: 131:200329

REFERENCE 6: 130:325588

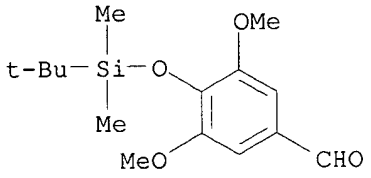
REFERENCE 7: 126:279275

REFERENCE 8: 122:82220

REFERENCE 9: 121:69064

REFERENCE 10: 120:108296

L15 ANSWER 5 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **106852-80-6** REGISTRY
CN Benzaldehyde, 4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4-tert-Butyldimethylsilyloxy-3,5-dimethoxybenzaldehyde
FS 3D CONCORD
MF C15 H24 O4 Si
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:355345

REFERENCE 2: 132:260679

REFERENCE 3: 131:13121

REFERENCE 4: 129:122487

REFERENCE 5: 123:198518

REFERENCE 6: 122:106200

REFERENCE 7: 121:230460

REFERENCE 8: 117:111194

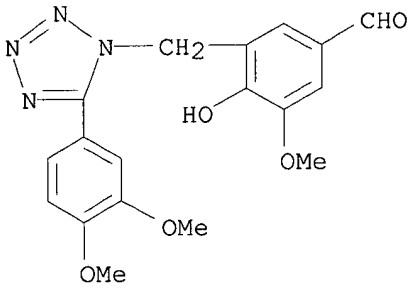
REFERENCE 9: 116:235461

REFERENCE 10: 115:28876

L15 ANSWER 6 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **104065-31-8** REGISTRY
CN Benzaldehyde, 3-[[5-(3,4-dimethoxyphenyl)-1H-tetrazol-1-yl]methyl]-4-hydroxy-5-methoxy-, mixt. with 3-[[5-(3,4-dimethoxyphenyl)-2H-tetrazol-2-yl]methyl]-4-hydroxy-5-methoxybenzaldehyde (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzaldehyde, 3-[[5-(3,4-dimethoxyphenyl)-2H-tetrazol-2-yl]methyl]-4-hydroxy-5-methoxy-, mixt. contg. (9CI)
MF C18 H18 N4 O5 . C18 H18 N4 O5
CI MXS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

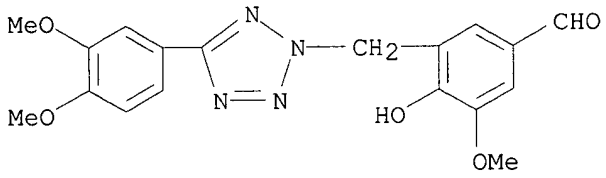
CM 1

CRN 104065-30-7
CMF C18 H18 N4 O5



CM 2

CRN 92595-41-0
CMF C18 H18 N4 O5



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

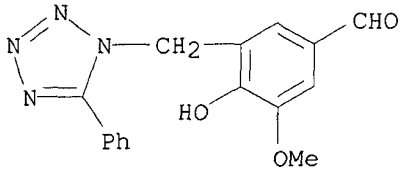
REFERENCE 1: 105:111139

L15 ANSWER 7 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **104065-29-4** REGISTRY
CN Benzaldehyde, 4-hydroxy-3-methoxy-5-[(5-phenyl-1H-tetrazol-1-yl)methyl]-, mixt. with 4-hydroxy-3-methoxy-5-[(5-phenyl-2H-tetrazol-2-yl)methyl]benzaldehyde (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzaldehyde, 4-hydroxy-3-methoxy-5-[(5-phenyl-2H-tetrazol-2-yl)methyl]-, mixt. contg. (9CI)

MF C16 H14 N4 O3 . C16 H14 N4 O3
CI MXS
SR CA
LC STN Files: CA, CAPLUS, RTECS*, TOXCENTER
(*File contains numerically searchable property data)

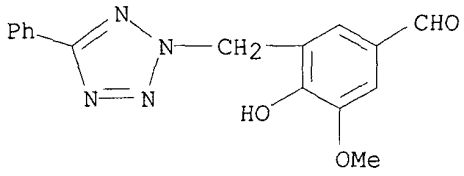
CM 1

CRN 104065-28-3
CMF C16 H14 N4 O3



CM 2

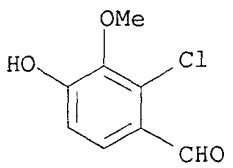
CRN 92595-37-4
CMF C16 H14 N4 O3



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 105:111139

L15 ANSWER 8 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **82668-20-0** REGISTRY
CN Benzaldehyde, 2-chloro-4-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Chloro-3-methoxy-4-hydroxybenzaldehyde
CN 2-Chlorovanillin
FS 3D CONCORD
MF C8 H7 Cl O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, PIRA, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

15 REFERENCES IN FILE CA (1967 TO DATE)
15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:39584

REFERENCE 2: 126:131298

REFERENCE 3: 124:333120

REFERENCE 4: 124:117084

REFERENCE 5: 123:59209

REFERENCE 6: 122:84027

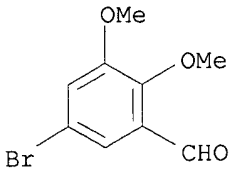
REFERENCE 7: 122:31501

REFERENCE 8: 121:212175

REFERENCE 9: 119:256162

REFERENCE 10: 119:233521

L15 ANSWER 9 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **71295-21-1** REGISTRY
CN Benzaldehyde, 5-bromo-2,3-dimethoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,3-Dimethoxy-5-bromobenzaldehyde
FS 3D CONCORD
MF C9 H9 Br O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19 REFERENCES IN FILE CA (1967 TO DATE)
19 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:295620

REFERENCE 2: 133:2077

REFERENCE 3: 129:149216

REFERENCE 4: 127:188165

REFERENCE 5: 126:89204

REFERENCE 6: 123:55767

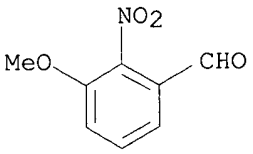
REFERENCE 7: 122:9778

REFERENCE 8: 121:74036

REFERENCE 9: 120:217198

REFERENCE 10: 115:135854

L15 ANSWER 10 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **53055-05-3** REGISTRY
CN Benzaldehyde, 3-methoxy-2-nitro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN m-Anisaldehyde, 2-nitro- (6CI)
OTHER NAMES:
CN 2-Nitro-3-methoxybenzaldehyde
CN 3-Methoxy-2-nitrobenzaldehyde
FS 3D CONCORD
MF C8 H7 N O4
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

55 REFERENCES IN FILE CA (1967 TO DATE)
55 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:87840

REFERENCE 2: 136:309755

REFERENCE 3: 136:294858

REFERENCE 4: 136:216720

REFERENCE 5: 136:167250

REFERENCE 6: 135:303856

REFERENCE 7: 135:272879

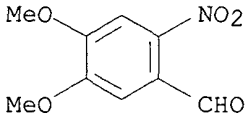
REFERENCE 8: 135:210601

REFERENCE 9: 135:166827

REFERENCE 10: 135:122416

L15 ANSWER 11 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **20357-25-9** REGISTRY
CN Benzaldehyde, 4,5-dimethoxy-2-nitro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Veratraldehyde, 6-nitro- (7CI, 8CI)
OTHER NAMES:
CN 2-Nitro-4,5-dimethoxybenzaldehyde
CN 3,4-Dimethoxy-6-nitrobenzaldehyde
CN 4,5-Dimethoxy-2-nitrobenzaldehyde
CN 4-O-Methyl-6-nitrovanillin
CN 6-Nitroveratraldehyde
FS 3D CONCORD
MF C9 H9 N O5
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

173 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
173 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:87840

REFERENCE 2: 136:263410

REFERENCE 3: 136:37618

REFERENCE 4: 135:304144

REFERENCE 5: 135:303672

REFERENCE 6: 135:137157

REFERENCE 7: 135:107300

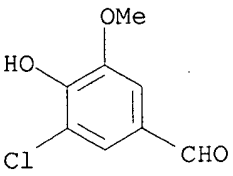
REFERENCE 8: 135:107264

REFERENCE 9: 135:92639

REFERENCE 10: 134:266308

L15 ANSWER 12 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **19463-48-0** REGISTRY
CN Benzaldehyde, 3-chloro-4-hydroxy-5-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin, 5-chloro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 3-Chloro-4-hydroxy-5-methoxybenzaldehyde
CN 5-Chlorovanillin
CN 5-Monochlorovanillin
FS 3D CONCORD
MF C8 H7 Cl O3
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,

CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DETHERM*, HODOC*, IFICDB, IFIPAT, IFIUDB, PIRA, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

72 REFERENCES IN FILE CA (1967 TO DATE)
72 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 132:246357

REFERENCE 2: 132:171816

REFERENCE 3: 132:83155

REFERENCE 4: 130:110061

REFERENCE 5: 130:12153

REFERENCE 6: 128:296015

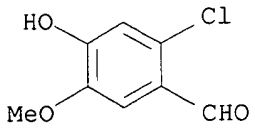
REFERENCE 7: 128:150419

REFERENCE 8: 127:331393

REFERENCE 9: 126:131298

REFERENCE 10: 126:69933

L15 ANSWER 13 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **18268-76-3** REGISTRY
CN Benzaldehyde, 2-chloro-4-hydroxy-5-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin, 6-chloro- (8CI)
OTHER NAMES:
CN 6-Chlorovanillin
CN 6-Monochlorovanillin
FS 3D CONCORD
MF C8 H7 Cl O3
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CHEMLIST, DETHERM*, PIRA, TOXCENTER, ULIDAT, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

74 REFERENCES IN FILE CA (1967 TO DATE)
75 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:73803

REFERENCE 2: 135:199960

REFERENCE 3: 135:94110

REFERENCE 4: 133:63103

REFERENCE 5: 132:335984

REFERENCE 6: 132:167838

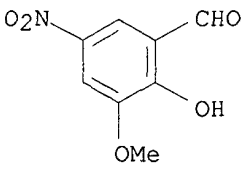
REFERENCE 7: 132:83155

REFERENCE 8: 132:39916

REFERENCE 9: 131:327168

REFERENCE 10: 129:132360

L15 ANSWER 14 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **17028-61-4** REGISTRY
CN Benzaldehyde, 2-hydroxy-3-methoxy-5-nitro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN m-Anisaldehyde, 2-hydroxy-5-nitro- (8CI)
CN o-Vanillin, 5-nitro- (6CI)
OTHER NAMES:
CN 2-Hydroxy-3-methoxy-5-nitrobenzaldehyde
CN 3-Methoxy-5-nitrosalicylaldehyde
CN 5-Nitro-o-vanillin
FS 3D CONCORD
MF C8 H7 N O5
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

98 REFERENCES IN FILE CA (1967 TO DATE)
98 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:69829

REFERENCE 2: 136:20032

REFERENCE 3: 135:137351

REFERENCE 4: 135:137235

REFERENCE 5: 135:76829

REFERENCE 6: 134:326221

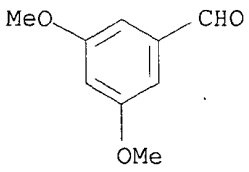
REFERENCE 7: 133:79004

REFERENCE 8: 132:243869

REFERENCE 9: 132:51138

REFERENCE 10: 131:331415

L15 ANSWER 15 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **7311-34-4** REGISTRY
CN Benzaldehyde, 3,5-dimethoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3,5-Dimethoxybenzaldehyde
FS 3D CONCORD
MF C9 H10 O3
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

429 REFERENCES IN FILE CA (1967 TO DATE)
431 REFERENCES IN FILE CAPLUS (1967 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:87838

REFERENCE 2: 137:46881

REFERENCE 3: 137:19546

REFERENCE 4: 136:385696

REFERENCE 5: 136:369539

REFERENCE 6: 136:309755

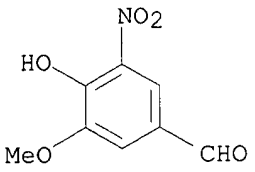
REFERENCE 7: 136:294748

REFERENCE 8: 136:263165

REFERENCE 9: 136:247571

REFERENCE 10: 136:247388

L15 ANSWER 16 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **6635-20-7** REGISTRY
CN Benzaldehyde, 4-hydroxy-3-methoxy-5-nitro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin, 5-nitro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 3-Methoxy-4-hydroxy-5-nitrobenzaldehyde
CN 3-Nitro-4-hydroxy-5-methoxybenzaldehyde
CN 4-Hydroxy-3-methoxy-5-nitrobenzaldehyde
CN 4-Hydroxy-5-methoxy-3-nitrobenzaldehyde
CN 5-Nitro-4-hydroxy-3-methoxybenzaldehyde
CN 5-Nitrovanillin
FS 3D CONCORD
MF C8 H7 N O5
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, PIRA, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

97 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
97 REFERENCES IN FILE CAPLUS (1967 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:78726

REFERENCE 2: 136:325295

REFERENCE 3: 136:183764

REFERENCE 4: 136:69829

REFERENCE 5: 136:63117

REFERENCE 6: 135:303782

REFERENCE 7: 135:303672

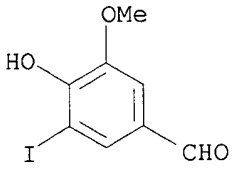
REFERENCE 8: 134:42002

REFERENCE 9: 134:29596

REFERENCE 10: 133:350025

L15 ANSWER 17 OF 27 REGISTRY COPYRIGHT 2002 ACS

RN **5438-36-8** REGISTRY
CN Benzaldehyde, 4-hydroxy-3-iodo-5-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin, 5-iodo- (7CI)
OTHER NAMES:
CN 3-Iodo-5-methoxy-4-hydroxybenzaldehyde
CN 4-Hydroxy-3-iodo-5-methoxybenzaldehyde
CN 4-Hydroxy-5-iodo-3-methoxybenzaldehyde
CN 5-Iodo-3-methoxy-4-hydroxybenzaldehyde
CN 5-Iodovanillin
FS 3D CONCORD
MF C8 H7 I O3
LC STN Files: AGRICOLA, BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

100 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
100 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:93682

REFERENCE 2: 136:327192

REFERENCE 3: 136:102329

REFERENCE 4: 136:53764

REFERENCE 5: 135:344501

REFERENCE 6: 135:272910

REFERENCE 7: 135:272895

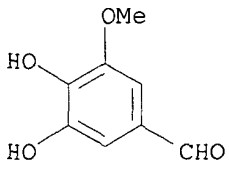
REFERENCE 8: 135:19663

REFERENCE 9: 135:5558

REFERENCE 10: 134:127813

L15 ANSWER 18 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **3934-87-0** REGISTRY
CN Benzaldehyde, 3,4-dihydroxy-5-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Protocatechualdehyde, 5-methoxy- (7CI, 8CI)
OTHER NAMES:
CN 3,4-Dihydroxy-5-methoxybenzaldehyde

CN 4,5-Dihydroxy-3-methoxybenzaldehyde
CN 5-Hydroxyvanillin
FS 3D CONCORD
MF C8 H8 O4
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, RTECS*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

58 REFERENCES IN FILE CA (1967 TO DATE)
58 REFERENCES IN FILE CAPLUS (1967 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:212615

REFERENCE 2: 136:74276

REFERENCE 3: 136:58508

REFERENCE 4: 135:357851

REFERENCE 5: 134:315873

REFERENCE 6: 134:141770

REFERENCE 7: 133:266641

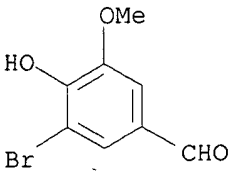
REFERENCE 8: 132:321792

REFERENCE 9: 132:37133

REFERENCE 10: 129:27796

L15 ANSWER 19 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **2973-76-4** REGISTRY
CN Benzaldehyde, 3-bromo-4-hydroxy-5-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin, 5-bromo- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 3-Bromo-4-hydroxy-5-methoxybenzaldehyde
CN 5-Bromo-3-methoxy-4-hydroxybenzaldehyde
CN 5-Bromo-4-hydroxy-3-anisaldehyde
CN 5-Bromo-4-hydroxy-3-methoxybenzaldehyde
CN 5-Bromovanillin
CN 6-Bromo-4-formyl-2-methoxyphenol
FS 3D CONCORD
MF C8 H7 Br O3
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB,

IFIPAT, IFIUDB, PIRA, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

184 REFERENCES IN FILE CA (1967 TO DATE)
184 REFERENCES IN FILE CAPLUS (1967 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:104945

REFERENCE 2: 137:42773

REFERENCE 3: 136:243022

REFERENCE 4: 136:134645

REFERENCE 5: 136:49485

REFERENCE 6: 135:318303

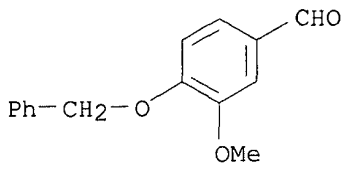
REFERENCE 7: 135:314602

REFERENCE 8: 135:272910

REFERENCE 9: 135:137701

REFERENCE 10: 135:137383

L15 ANSWER 20 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **2426-87-1** REGISTRY
CN Benzaldehyde, 3-methoxy-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzaldehyde, 4-(benzyloxy)-3-methoxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 3-Methoxy-4-(benzyloxy)benzaldehyde
CN 4-(Benzyloxy)-3-methoxybenzaldehyde
CN 4-O-Benzylvanillin
CN Benzylvanillin
CN O-Benzylvanillin
CN Vanillin benzyl ether
FS 3D CONCORD
MF C15 H14 O3
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

274 REFERENCES IN FILE CA (1967 TO DATE)
275 REFERENCES IN FILE CAPLUS (1967 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:78723

REFERENCE 2: 137:63372

REFERENCE 3: 137:46778

REFERENCE 4: 137:20309

REFERENCE 5: 136:216740

REFERENCE 6: 136:200176

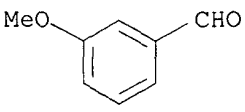
REFERENCE 7: 136:85826

REFERENCE 8: 136:69651

REFERENCE 9: 135:344364

REFERENCE 10: 135:288633

L15 ANSWER 21 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **591-31-1** REGISTRY
CN Benzaldehyde, 3-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN m-Anisaldehyde (8CI)
OTHER NAMES:
CN 3-Methoxybenzaldehyde
CN m-Methoxybenzaldehyde
FS 3D CONCORD
MF C8 H8 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, NAPRALERT, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1746 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1749 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:109122

REFERENCE 2: 137:109096

REFERENCE 3: 137:109087

REFERENCE 4: 137:87840

REFERENCE 5: 137:79026

REFERENCE 6: 137:78825

REFERENCE 7: 137:78783

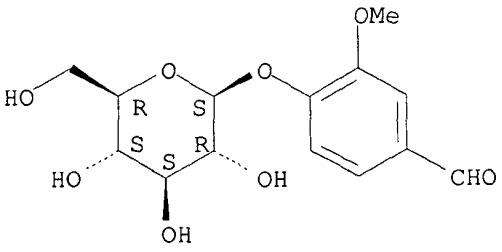
REFERENCE 8: 137:78731

REFERENCE 9: 137:78646

REFERENCE 10: 137:78532

L15 ANSWER 22 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **494-08-6** REGISTRY
CN Benzaldehyde, 4-(.beta.-D-glucopyranosyloxy)-3-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Avenein (6CI, 7CI, 8CI)
OTHER NAMES:
CN Glucovanillin
CN Vanillin .beta.-D-glucopyranoside
CN Vanillin glucoside
CN Vanilloside
FS STEREOSEARCH
DR 6049-95-2
MF C14 H18 O8
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, IPA, MRCK*, PROMT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

38 REFERENCES IN FILE CA (1967 TO DATE)
38 REFERENCES IN FILE CAPLUS (1967 TO DATE)

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:29708

REFERENCE 2: 136:299446

REFERENCE 3: 136:68980

REFERENCE 4: 135:343352

REFERENCE 5: 134:237711

REFERENCE 6: 133:321157

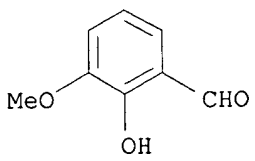
REFERENCE 7: 133:345

REFERENCE 8: 132:298448

REFERENCE 9: 129:330591

REFERENCE 10: 128:235007

L15 ANSWER 23 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **148-53-8** REGISTRY
CN Benzaldehyde, 2-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN m-Anisaldehyde, 2-hydroxy- (8CI)
CN o-Vanillin (6CI)
OTHER NAMES:
CN 2-Hydroxy-3-methoxybenzaldehyde
CN 2-Hydroxy-m-anisaldehyde
CN 2-Vanillin
CN 3-Methoxy-2-hydroxybenzaldehyde
CN 3-Methoxysalicylaldehyde
CN 6-Formyl-2-methoxyphenol
CN 6-Formylguaiacol
CN NC 005
FS 3D CONCORD
MF C8 H8 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1138 REFERENCES IN FILE CA (1967 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1139 REFERENCES IN FILE CAPLUS (1967 TO DATE)
33 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:118510

REFERENCE 2: 137:104945

REFERENCE 3: 137:102959

REFERENCE 4: 137:88473

REFERENCE 5: 137:78835

REFERENCE 6: 137:74803

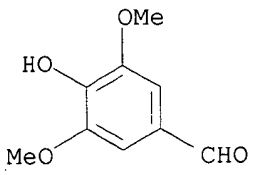
REFERENCE 7: 137:47151

REFERENCE 8: 137:47117

REFERENCE 9: 137:42773

REFERENCE 10: 137:40855

L15 ANSWER 24 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **134-96-3** REGISTRY
CN Benzaldehyde, 4-hydroxy-3,5-dimethoxy- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,6-Dimethoxy-4-formylphenol
CN 3,5-Dimethoxy-4-hydroxybenzaldehyde
CN 4-Formyl-2,6-dimethoxyphenol
CN 4-Hydroxy-3,5-dimethoxybenzaldehyde
CN Cedar aldehyde
CN Gallaldehyde 3,5-dimethyl ether
CN Syringaldehyde
CN Syringic aldehyde
FS 3D CONCORD
MF C9 H10 O4
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1522 REFERENCES IN FILE CA (1967 TO DATE)
16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1525 REFERENCES IN FILE CAPLUS (1967 TO DATE)
28 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:113694

REFERENCE 2: 137:108518

REFERENCE 3: 137:104945

REFERENCE 4: 137:98305

REFERENCE 5: 137:95374

REFERENCE 6: 137:93012

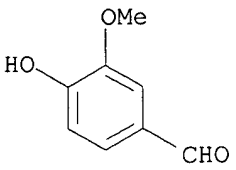
REFERENCE 7: 137:90941

REFERENCE 8: 137:90076

REFERENCE 9: 137:83362

REFERENCE 10: 137:64726

L15 ANSWER 25 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **121-33-5** REGISTRY
CN Benzaldehyde, 4-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanillin (8CI)
OTHER NAMES:
CN 2-Methoxy-4-formylphenol
CN 3-Methoxy-4-hydroxybenzaldehyde
CN 4-Formyl-2-methoxyphenol
CN 4-Hydroxy-3-methoxybenzaldehyde
CN 4-Hydroxy-5-methoxybenzaldehyde
CN 4-Hydroxy-m-anisaldehyde
CN H 0264
CN Lioxin
CN m-Methoxy-p-hydroxybenzaldehyde
CN p-Hydroxy-m-methoxybenzaldehyde
CN p-Vanillin
CN Rhovanil
CN Vanillaldehyde
CN Vanillic aldehyde
FS 3D CONCORD
DR 8014-42-4, 52447-63-9
MF C8 H8 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6998 REFERENCES IN FILE CA (1967 TO DATE)
138 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
7008 REFERENCES IN FILE CAPLUS (1967 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114553

REFERENCE 2: 137:114518

REFERENCE 3: 137:114199

REFERENCE 4: 137:113694

REFERENCE 5: 137:112698

REFERENCE 6: 137:110692

REFERENCE 7: 137:109935

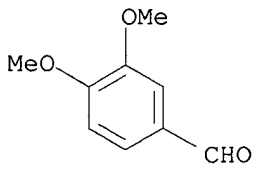
REFERENCE 8: 137:109514

REFERENCE 9: 137:109106

REFERENCE 10: 137:109087

L15 ANSWER 26 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **120-14-9** REGISTRY
CN Benzaldehyde, 3,4-dimethoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Veratraldehyde (7CI, 8CI)
OTHER NAMES:
CN 3,4-Dimethoxybenzaldehyde
CN 3,4-Dimethoxybenzenecarbonal
CN 4-O-Methylvanillin
CN Methylvanillin
CN Protocatechualdehyde dimethyl ether
CN Protocatechuic aldehyde dimethyl ether
CN Vanillin methyl ether
CN Veratral
CN Veratric aldehyde
CN Veratrum aldehyde
CN Veratryl aldehyde
FS 3D CONCORD
MF C9 H10 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3036 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3041 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:109154

REFERENCE 2: 137:109139

REFERENCE 3: 137:109106

REFERENCE 4: 137:109096

REFERENCE 5: 137:93770

REFERENCE 6: 137:93605

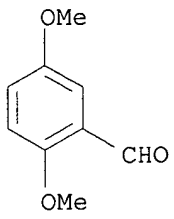
REFERENCE 7: 137:88408

REFERENCE 8: 137:79101

REFERENCE 9: 137:78532

REFERENCE 10: 137:47168

L15 ANSWER 27 OF 27 REGISTRY COPYRIGHT 2002 ACS
RN **93-02-7** REGISTRY
CN Benzaldehyde, 2,5-dimethoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,5-Dimethoxybenzaldehyde
FS 3D CONCORD
MF C9 H10 O3
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

544 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
545 REFERENCES IN FILE CAPLUS (1967 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:109096

REFERENCE 2: 137:20309

REFERENCE 3: 137:20278

REFERENCE 4: 136:379474

REFERENCE 5: 136:340450

REFERENCE 6: 136:310048

REFERENCE 7: 136:309755

REFERENCE 8: 136:294790

REFERENCE 9: 136:294720

REFERENCE 10: 136:279185